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ABSTRACT

This report presents an account and evaluation of a two-year survey-feedback problem-solving organization development (OD) project in a small city's school district. The project combined the survey-feedback technology with structural alterations in the school district and the training of internal change agents. Both planned and unplanned events have been reported. Chapter 1 presents the theoretical justification for the particular intervention. The field settings and the entry processes are described in chapter 2. Chapter 3 presents the model and design for both the summative and formative evaluations and describes all forms of data collection and the specific instruments that were used. Chapter 4 compares the groups of participating elementary schools with the nonparticipating. Chapter 5 describes the program implementation during the first year. Chapter 6 provides three kinds of summative evaluation. Chapters 7 and 8 provide a formative evaluation consisting of systematic case studies and evaluation of process data. Chapter 9 provides a summary assessment of the project viewed in terms of a framework for decision-making and evaluation. The final chapter discusses this approach to OD and to school improvement in the context of other possible strategies and programs for change. (Author/IRT)

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Final Report

Grant No. NEG-003-0172

AN ASSESSMENT OF A STRUCTURAL TASK APPROACH TO ORGANIZATIONAL DEVELOPMENT IN A SCHOOL SYSTEM

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EXECUTIVE SUMMARY

This report presents an account and evaluation of a two-year survey-feedback problem-solving Organization Development project in a small city school district. The project was conceived of as a replication, refinement, and expansion of an earlier implementation of the same basic intervention design in a field experiment by Coughlan, Cooke, and Safer (1972). The present implementation expanded that school-level intervention to a district-wide change effort and concentrated on process evaluation. It maintained the strategy of combining the survey-feedback technology with structural alteration in the school district and the training of internal change agents to reduce dependence on external interventionists and to increase chances of lasting change. The length of this report reflects in large part the voluminous data which were collected during the two years. Realizing that a quantitative summative evaluation is not sufficient to judge the worth of a program, great pains were taken to thoroughly document all intervention activities, to get feedback from district members after each activity, and to view the intervention from the perspective of the members of the host school district at all organizational levels rather than to present and consider only the viewpoints of detached observers or the project study team. The approach in this report is to acknowledge and address the weaknesses of each kind of data and to present complete and varied enough information for the reader to get a feel for what really happened and to determine if the intervention was "successful" or not.

As with any change effort, everything did not go as planned in this implementation. Both planned and unplanned events have been thoroughly reported in this document. An attempt has been made to isolate the variables

that accompanied success as well as to identify the variables that explain the failures. As researchers, we have focused on what we have learned about developing organizations. As evaluators, we have focused on identifying the goals and measuring the impact of the program. As researchers with a particular interest in schools, we have used this experience and the information gained from it to refine our conceptual model of schools and the process of Organizational Development in schools. This report is an amalgam of our learnings in all three capacities.

Chapter One presents the theoretical justification for the particular intervention implemented in this research project. Drawing on open systems contingency theory, it differentiates between the institutional and technical environments of schools and proposes a form of faculty peer-group collective decision-making structures as the appropriate mechanism for dealing with uncertainty and ambiguity at the technical level, or, in less abstract terms, for solving the problems which are evident to the teachers in their day-to-day execution of the teaching function of the school. Chapter One describes the components of this particular OD intervention and presents an open systems model to be used as a framework for the quantitative summative evaluation of the project.

The field settings and the entry processes are described in the second chapter. The difficulty of gaining access to a research site for this kind of intervention is discussed. In addition, the entry process itself is described as a dynamic two-stage process, the first stage occurring at the administrative level and the second at the school level. Finally, superintendent turnover, a common phenomenon in public schools these days, added one more hurdle in the process as there were three different superintendents during the course of this study in the target district.

The rather complex research design described in Chapter Three reflects our belief that evaluation is multifaceted as well as our desire to gain information useful to several audiences. Summative and formative evaluation were equally stressed. Chapter Three presents the model and design for each and describes all forms of data collection and the specific instruments which were used. In this study, questionnaires were used, interviews were done, system documents were analyzed, and participant observation techniques were used. The particular quasi-experimental design which emerged was the result of self-selection by approximately half of the district's schools into the program. Specific research hypotheses are discussed.

Chapter Four compares the group of participating elementary schools with those which did not choose to participate. There were significant differences between the two groups on many indicators. Questionnaire data indicate that the teachers in the participating schools viewed their organizations less favorably initially than did non-participating schools. Demographic data indicate that the participating schools were smaller, had less union-oriented faculties, and had fewer minority students and higher standardized test scores. Although these facts might suggest that the problems typically faced by urban schools were not so prevalent in the participating schools, nevertheless, attitudes of the teachers were less favorable. The participating schools, as a group, represented quite a cross section on most attributes; and while different, on the average, from non-participating schools, nevertheless can be considered to be a representative sample for purposes of determining the applicability of the OD intervention.

Chapter Five is a straightforward description of program implementation during the first year. It includes a rather detailed description of the training received by the internal change agents as the training was the major interface between the university-based research team and the host organization. It also gives the results of the interim evaluation which was conducted at the end of the first year and discusses changes that were made in the second-year training sessions to correct problems or weaknesses which had become evident. In particular, more attention was given to group processes, handling of conflict, and clarification of program roles.

Chapter Six provides three kinds of summative evaluation. A detailed quantitative summative evaluation based on questionnaire results reveals a pattern of significant changes in the hypothesized direction among the participating schools, bringing those schools up to parity with non-participating schools on many measures. Changes in the feedback survey are discussed in light of the particular problem solutions which were implemented by faculty problem-solving groups. Problems were identified and solutions implemented in a broad range of areas. In general, faculties dealt with concrete issues having to do with school-level use and coordination of space and materials, communication of information between teachers and between teachers and their principal, and coordination and improvement of instructional activities in the school.

Finally, the results of structured interviews designed to elicit the perceptions of district members concerning program outcomes indicate that increased communication between faculties and principals and among faculty and increased faculty influence were viewed by teachers as the major benefits of the program. Although the principals and district administrators were mixed in their reactions to the program, negative assessments related more to the manner of implementation in some schools or to the less than full commitment of the district to the project rather than to the nature and applicability of the OD program itself.

Chapters Seven and Eight provide a formative evaluation consisting of systematic case studies and evaluation of process data using a systems framework. The quality of implementation and program outcomes differed greatly among the eight participating schools, ranging from one school which experienced nearly complete transformation to a new model of functioning to another school which voted after the first year to terminate the program and two others in which the program atrophied. The success of the program depended very heavily on the ability and effort of the internal change agents to successfully adapt the components of the program to the context of their own schools.

Chapter Nine provides a summary assessment of the project viewed in terms of Stufflebeam and others' (1971) framework for decision making and evaluation. While this implementation provided a confirmation of the usefulness of this OD design for confronting some of the organizational weaknesses in public schools, the expansion to a district-level intervention also pointed out the complexity of the power, influence, and accountability issues in schools that must be directly addressed if this kind of program is to be more generally accepted in public schools.

The final chapter discusses this approach to Organization Development and to school improvement in the context of other possible strategies and programs for change. This OD design is a problem-solving approach and should be differentiated from OD approaches that are more concerned with changing people rather than social systems. This approach also utilizes a structural change in the development of the problem-solving groups and, thus, is more concerned with building the "change" into the system. The general goal of this program to increase an organizational capacity for solving problems differentiates it from more specific educational innovations and changes designed to solve particular problems. In fact, this program is viewed as a way to develop the organization so that it becomes more flexible in successfully adopting and adjusting to changes and innovations designed to make the schools more responsive to their environment.

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Like any large scale study, this one could not have been accomplished without the help and cooperation of a large number of people. Dean B. J. Chandler, of the School of Education, Northwestern University, was instrumental in helping us to gain access to the district in which the intervention was carried out. His counsel and support during the study also was essential. The Survey Research Center, The University of Michigan; the School of Business, University of Pittsburgh; and the Graduate School of Management, Northwestern University provided essential institutional support during the study for which we are grateful. During the course of the study, many secretaries worked on the project. However, one notes special recognition for her typing, editing, and general helpful comments. Without Jane Stanton of the Survey Research Center, The University of Michigan, the final document would not have been as good as it is.

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Finally, and most importantly, we gratefully acknowledge the contributions of our late colleague, Professor Robert J. Coughlan, whose work on organizational change and staff development in schools provided the foundation for this research.

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CHAPTER ONE

THE INTERVENTION: THEORY AND PRACTICE

Public schools have been criticized repeatedly for their reportedly low productivity, their lack of responsiveness to the needs of students and faculty members, and their inability to effectively serve their communities. While various forces beyond the control of the schools account for some of the problems for which they are blamed, it is apparent that some of the problems are due to inadequacies within the educational institutions themselves. The "overly bureaucratic" and inflexible structure of educational systems has been cited by many observers as one of the underlying problems. The frequency with which this problem has been examined had led Hawley to conclude that "books criticizing the dysfunctional consequences of organizational rigidity in public schools are so numerous as to give the publishing industry a stake in resisting educational reform" (undated, p. 1).

Public and professional opinions, as well as many research findings, have crystallized the need for the development of strategies for increasing the structural flexibility of schools, for promoting educational change, and for making schools a better place for those who work and study there. In response to this need, various organizational development programs--planned interventions designed to improve the organization's processes, health, and effectiveness--have been developed and implemented in educational systems. The amount of organizational development (OD) research and experimentation conducted in schools, however, is relatively minimal when compared to that conducted in business and industrial organizations. Additionally, many OD programs in schools have been only marginally effective (e.g., Miles et al.,

1969) and other programs have been evaluated too superficially to permit any judgements concerning their success or failure.

One possible shortcoming of many OD programs for schools is that these programs, while generally well-grounded in OD theory and practice, are not based on adequate theoretical models of schools as organizations. Educational systems are distinct from other organizations in numerous ways, and it is unlikely the OD technologies developed for non-educational organizations will be entirely appropriate for schools. The purpose of our research, therefore, was to develop an OD strategy which is consistent with the institutional environment of educational systems, the professional capabilities of school personnel, and the inherent uncertainties and complexities of educational technologies. The OD program described in this report is a modified and expanded version of an intervention which, within the framework of a four group experimental design, was shown to have some positive impact on schools (Coughlan, Cooke & Safer, 1972). The present intervention, a survey feedback and problem-solving program, was implemented and evaluated in a medium-sized school district located in the midwest. Our description of the intervention in terms of entry, implementation, and summative and formative evaluation will be preceded by a review of the theoretical foundation of the program

Theoretical Background

Like other complex organizations, educational systems require some minimal amount of continuity--i.e., some predictability and stability of internal components and their interrelationships--if they are to maintain their identity as organizations. However, they must also be responsive to their interdependence with the environment and maintain open, or permeable, boundaries (Georgopoulos, 1974). Schools therefore must exhibit flexible structures for coping with complex and unstable components in the environment, but must also exhibit relatively stable arrangements and procedures for maintaining their identity and for efficiently accomplishing organizational tasks. Organizations, including public schools, can be envisioned as formal social systems which are faced with environmental uncertainty and indeterminateness, yet are subject to the criterion of rationality and therefore need determinateness and certainty (Thompson, 1967). This conceptualization of the organization implies that schools experience simultaneous, and seemingly contradictory, pressures to operate as both open and closed systems.

Educational organizations operate within the type of environment which has been characterized as complex and dynamic by some theorists and as turbulent and uncertain by others (e.g., Duncan, 1972; Emery & Trist, 1965; Lawrence & Lorsch, 1967). Public schools are potentially affected by, and must adapt to, diverse environmental components, including: federal, state, and local legislation; other educational and non-educational organizations with which the school interacts; technological and curriculum innovation; professional associations and unions; and organized and unorganized sectors of the community. The uncertainty implied by this complex environment increases as changes take place within these components--e.g., as the size and composition of the local community changes--and as components within the environment interact in ways which have secondary repercussions for the schools. This environment presents equivocality which must be reduced, or uncertainty which must be absorbed by the organization (March & Simon, 1958; Weick, 1969). Contemporary organizations require some degree of flexibility to accommodate environmental uncertainty and disturbance (Lipham, 1964)--"to initiate new structures and procedures, or to revise the goals of the organization" (Lonsdale, 1964, p. 174). However, the organization needs stability for survival, and some enduring structure is required if technical activities are to be performed in an orderly, rational, and efficient manner. Stogdill sees the ideal as being the "median range within which flexibility and stability optimize the capacity for survival" (1954, p. 286).

Thompson (1967) suggests that organizations respond to the conflict between the environment's "indeterminateness and uncertainty" and the organization's requirement for "certainty and determinateness" by locating different types of problems and decisions within different organizational subsystems. This perspective is based on Parson's (1960) observation that organizations exhibit three distinct levels of control and responsibility. At the institutional level, the organization is articulated with the larger social system within which it operates and the existence of the organization is legitimized in terms of the norms and values of the society and community. "Here 'open' systems logic, permitting the intrusion of variables penetrating the organization from outside, and facing up to uncertainty, seems indispensable" (Thompson, 1967, p. 12). The managerial level mediates between the technical suborganization and those who use its products and services, and procures the resources necessary for carrying out the technical function of the organization (Parsons, 1958). Educational administrators, for example, facilitate the activities of the teachers by limiting the number of variables affecting their work and by "buffering" the teaching activity from potentially disturbing forces. At the technical level, members of the system solve problems and make decisions centering around the core task of the organization. In schools, these educational decisions can be made with some degree of rationality as the technical operation is insulated from some of the uncertainty of the external environment. In contrast to the institutional level, a relatively 'closed' system of logic can operate at the core level; and in this manner, the school organization can exhibit simultaneously aspects of both open and closed organizational structure.

This conceptualization seems to adequately reflect the realities of school organization. School boards can be seen as carrying out the institutional activities; principals and other administrators can be viewed as performing managerial activities; and teachers can clearly be identified as the technical "core" operatives. Furthermore, this approach seems appropriate for schools because it does not assume that decisions at one level are subordinate to those at other levels--the levels are "qualitatively" rather than hierarchically different. Similarly, it is not implied that in all organizations the technical core can be completely buffered from uncertainty. In certain productive organizations, the technical activity involves the transformation of materials and is relatively certain and programable; in schools and other maintenance organizations, the task is one of molding people and is inherently uncertain (Katz & Kahn, 1966). Uncertainty and discretion at the technical level are implicit as teachers are expected to solve problems and make decisions in response to the motivational and cognitive needs of the students. This uncertainty is amplified because the needs of students are diverse and changing, and because there exists much ambiguity regarding the teaching behaviors which are most appropriate for different situations (Hawley, 1972). Under these conditions, the organizational members performing the technical task must make certain decisions and absorb some uncertainty in performing the tasks specified by the institutional subsystem.

> managerial personnel usually are only partially competent to plan and supervise the execution of the technical operation. The

> managers present specifications to the technical subsystem, but vice versa, the technical people present 'needs' which constitute specifications to the management; on various bases the technical people are closest to the operating problems and know what is needed (Parsons, 1958, p. 43).

The implication is that in organizations with complex and dynamic technical activities, control can flow from the technical to the managerial/institutional levels (i.e., from the inside of the organization outward) as well as from the "outside in." Whereas technical core tasks and objectives may be determined at the institutional and managerial levels, these subsystems are reciprocally controlled--either formally or informally--by technical level activities. A critical variable determining the amount of control emanating from the technical level is the amount of uncertainty which must be absorbed in the performance of technical activities (March & Simon, 1958). The optimal location and distribution of control in organizations, therefore, may depend on the relative amount of uncertainty experienced by the various subsystems. This line of reasoning is consistent, at least in principle, with organizational contingency theories which focus on the external environment and the internal technology.

Institutional and Technical Environments

Various "contingency theories" have been proposed which posit that the appropriate structures for organizations depend upon the uncertainty, complexity, or instability of the external environment. Similarly, a significant amount of research has been conducted which indicates that the appropriateness of organizational structures depends on the type of technology being used. It is proposed here that both lines of research are applicable to educational systems and that the structure of schools should be responsive to both the external or institutional environment and the internal or technological environment.

The majority of the organizational contingency theory research has focused on either the external environment or the technical environment, or on some entangled combination of the two. The work of Woodward (1965), Trist (1959), and Perrow (1967) has emphasized the technology of the organization. Emery and Trist (1965) and Katz and Kahn (1973) have focused on the structural implications of the external environment. Burns and Stalker (1960) have considered both the organizational technology and the external environment, but accentuated the rate of change of the technological and market systems. Lawrence and Lorsch's (1967) contingency theory involved both "environments," with the relative emphasis on external components or technological factors varying, depending on the departments under consideration.

In general, organizational contingency theories have focused on one environment to the exclusion of the other, or have implicitly or explicitly intertwined the two, in defining "appropriate" organizational structures. Duncan's (1972) measure of environmental uncertainty, however, is based on discrete sets of internal and external environmental components and factors. It seems that these two types of environments could be considered independently in defining their implications for organizational structural arrangements and procedures. The characteristics of the external environment may suggest the appropriateness of certain structural arrangements, and the characteristics of the internal environment may require other structural arrangements, for the effective functioning of the organization. This suggests the following distinction between organizational "environments:" the institutional environment consists of those factors which potentially are considered in decisions regarding the organization's articulation with the society, community, and other organizations; the technical environment consists of those factors which potentially are considered in decisions regarding the execution of core organizational tasks. The institutional and technical environments are related to, respectively, the input/output and throughput systems of the organization (Baker, 1972; Katz & Kahn, 1966; Miller, 1971).

Both institutional and technical factors are taken into consideration by decision makers at all levels of the school organization. As Parson's framework suggests, however, the institutional factors may more directly affect those decisions made at the "higher" levels of the organizational hierarchy. Decisions made in consideration of institutional factors (i.e., to absorb external environmental uncertainty) flow inward and define some of the parameters for, or premises underlying, other decisions made by organizational members. For example, educational goals and policies defined by the school board greatly influence the direction and scope of technical activities and, consequently, the decisions made in carrying out those activities are "nested" within the institutional policies. Technical core factors more directly affect decisions made by teachers; these decisions, in turn, flow outward and can redefine the premises and factors considered by the institutional subsystem. For example, teachers may make decisions regarding the needs of particular student groups, transmit this information upward, and influence administrative decisions concerning educational objectives, the expenditure of resources, etc.. Both technical and institutional environmental factors may be considered by those at the managerial level of the organization. Administrators are faced with the problem of mediating between two groups of decision makers (i.e., teachers and board members) who are constantly dealing with different types of uncertainty and, thus, these "middle managers" are indirectly exposed to both technical and institutional environmental forces. Additionally, these personnel are directly exposed to both types of environments as, for example, the principal deals directly with students and community groups.

Certain factors considered by organizational decision makers may be neither clearly institutional nor technical, and it is apparent that factors within the two environments are dynamically interrelated. Nevertheless, the two environments may be sufficiently distinct conceptually to suggest that the organization structure of educational systems is contingent upon the characteristics of two different environments. This, in turn, implies that organizations should be analyzed in terms of multiple rather than unitary structures because different types of arrangements, interrelationships, and procedures may be appropriate for the decision making necessary for the reduction of the different types of environmental uncertainty.

Authority and Collective Decision Structures

Effective educational systems may exhibit structural arrangements which provide for the reduction of institutional uncertainty and structural arrangements which provide for the reduction of technical uncertainty. These two sets of arrangements and procedures would be associated with decision making and change initiation emanating from different organizational levels and with organizational control and communication flowing in different directions.

Procedures, roles, and arrangements associated with decisions flowing from the institutional (and managerial) level "inward" comprise what will be called authority decision structures. Authority decision structures emerge as organization members "learn" how to cope with the institutional environment and regularize procedures and configurations which provide for continued adaptation to the larger social system. Authority decision structural arrangements, by promoting the legitimation of the organization and facilitating the organization's input and output exchanges with the large social system, eliminate much of the indeterminateness which would otherwise surround core activities. As noted above, however, institutional and managerial decision making cannot eliminate all the indeterminateness associated with the performance of technical activities in schools. Some of this residual uncertainty is absorbed by individual teachers acting autonomously in responding to the learning and motivational problems of students. To the extent that teachers engage in decision making and problem solving relevant to technical issues, they are, in a certain sense, buffering the managerial and institutional levels from internal uncertainty.

Certain types of internal uncertainty, however, cannot be absorbed by either the authority structure or the autonomous efforts of individual teachers. The workflow of schools involves complex interdependencies which imply contingencies (i.e., factors which may vary) which the school must meet. While certain aspects of the workflow involve pooled or sequential interdependencies, some aspects involve reciprocal interdependencies and pose more complex coordination problems. This arises, for example, as different teachers simultaneously provide students with different expectations about the role of the student or make different, sometimes conflicting, demands on the students (Charters, 1964). Furthermore, the efforts of special services personnel may shape the "inputs" for the regular classroom teachers whose "outputs," in a reciprocal manner, influence the inputs of the former group. The contingencies implicit in these interdependencies suggest that non-programmed modes of coordination (e.g., by feedback or by mutual adjustment) are more appropriate than programmed modes (e.g., by standardization or by plan [Georgopoulos, 1974; March & Simon, 1964; Thompson, 1967]). This coordination requires information exchange and decision making on the part of those role incumbents whose efforts are interdependent.

Recurring activities at the technical level which involve communicating, collaborative decision making, and innovating comprise what we will refer to as collective decision structures. Collective structures represent those role activities, procedures, and communication networks relevant to decisions which emanate from the technical level and, in many cases, may flow outward to the managerial or institutional levels. These collective structures can serve to meet the contingencies which arise as a result of reciprocal interdependencies and can also be instrumental in coordinating sequentially interdependent efforts. Assuming that the workflow of educational systems involves these complex interdependencies, it seems that schools must exhibit both collective and authority structures if they are to function effectively.

Collective Decision Structures in Schools

Despite the apparent need for collegial decision making and problem solving in educational systems, faculty collective processes are typically poorly structured in schools. In his analysis of the causes and effects of organizational rigidity in schools, Hawley concludes that: (1) horizontal communication is practically non-existent in schools, (2) teachers are generally isolated from one another, and (3) teachers have little or no control over many matters which directly affect their work activities. The absence of collective structures is reflected in the "structural looseness" (Bidwell, 1965) or "loose coupling" (Weick, 1976) of schools. Public schools are most easily characterized by the autonomy of teachers and subunits or, paradoxically, by the bureaucratization of the systems. Neither bureaucracy nor autonomy, however, is appropriate for responding to certain types of problems and, thus, certain critical decisions in schools are not being made or are simply "out of control."

Though most educational systems lack formal collective structures, informal decisions are made collectively in almost all schools. Lortie (1964) has observed that, at least in one school, the "over the coffee pot" meetings between senior members of several departments accomplished more than merely fulfilling the social needs of the informal group members. "The mixed membership of the group led to its becoming [illegible] kind of a 'clearing-house' for problems which could otherwise erupt into [illegible]terdepartment conflicts" (p. 1). A great deal of power and control was vested informally in this group--other teachers respected the members and looked toward the group for leadership. The core level control of this group possibly increased the effectiveness of the school by averting conflicts and increasing coordination.

Formalized collective structures might serve the same coordinative functions as this informal group, and these functions may be critical to the effectiveness of schools lacking informal systems which could substitute for this vacuum in the (formal) structure. This proposal to increase the structuring of public schools seems to run counter to the belief that schools are overly structured and that this implies rigidity, low faculty influence, dissatisfaction, etc.. However, in a study of 20 high schools, Moeller (1962) found that teachers' sense of power was significantly higher in bureaucratized as compared to less bureaucratized schools. In the bureaucratized schools, the power perceived by teachers seemed to result from the orderly, understandable, and predictable policies and decision rules:

> Knowledge of policy enables teachers to know the most effective course of formal action to take in order to influence the policy makers. . . . Greater predictability seems to stem from the published policy of these systems which assures teachers of specific avenues of communication up the line to the decision making centers of the administration (Moeller, 1962, p. 4).

High specificity of roles and decision making procedures does not necessarily imply powerlessness at the technical level--specification may instead identify means for teacher influence. Formal structures established expressly for the purpose of increasing faculty participation have been shown to be associated with a somewhat less hierarchical distribution of control and high faculty influence (Cooke & Tannenbaum, 1976). Furthermore, formal structures have been related to increased innovative decision making; Kelly (1977) has shown that in schools with formal structures for curriculum decision making, faculty members better understand their role in the change process, perceive greater influence, and implement more curriculum changes than in schools without formal structures. Collective structures, superimposed over existing authority structures, are likely to have the same effect. These structures could reinforce the existing arrangements in schools which, according to March and Simon, can be used "for developing, elaborating, instituting, and revising programs" (1958, p. 170) for performing their tasks.

Decision Making and Change Process

Except for those decisions made autonomously by individual teachers, most of the decisions and changes made in schools are the result of authority decision processes. Focusing on innovation and change processes, Rogers and Shoemaker define authority decisions as those "which are forced upon an individual by someone in a superordinate power position" (1971, p. 301). According to Rogers and Shoemaker, authority decision making reflects the existence of two different units in a social system: (1) the adoption unit which consists of those individuals who must implement the decision or the innovation and (2) the decision unit, comprised of those individuals who have formal authority over the adopting unit and who decide whether the subordinate group will implement particular changes or innovations. In public school systems, school boards, superintendents, and principals commonly assume decision unit roles as they respond to community pressures, state and federal legislation, and new knowledge and technology. Change decisions made at the managerial and institutional levels are communicated to technical core operatives (the faculty) who then are expected to carry out the change, i.e., incorporate the new program or procedure into ongoing operations.

Numerous change and decision-making models (both prescriptive and descriptive) have been conceptualized which assume, either implicitly or explicitly, that organizational decisions are reached through authority processes. These models suggest that autnority decision processes in schools involve a number of distinguishable subprocesses (Hage & Aiken, 1970; Rogers & Shoemaker, 1971; Stufflebeam, 1967). These subprocesses, and the programs and activities associated with them, are generally consistent with the structures of educational systems. The prevailing role, normative, and communication structures of schools provide a base on which members can rely to make decisions in a manner consistent with the authority process. These structures, however, may not support collective decision processes and, as implied in the above sections, discrete collective structures may be required to provide a base for collegial decision making.

Collective processes differ substantially from authority processes and, consequently, are likely to be based on different roles and communication structures. Unlike authority decisions, collective decisions are made by members of a social system or formal organization by consensus. Rogers and Shoemaker (1971) have developed a five-stage model of collective decision making which represents innovation decision processes in communities. Building on their work, we have developed a model which represents collective decision processes in organizations where authority processes are already in use (Cooke, 1973). The modified model includes seven subprocesses: evaluation, solution generation, internal diffusion, legitimation, adoption, implementation, and routinization. (This prescriptive or ideal model of collective processes is depicted in Figure 1.1). The activities associated with these subprocesses suggest that they are based on structures different from those on which authority processes are based.

The collective process begins with the identification and diagnosis of problems by organizational members on a collaborative basis. The collective nature of these evaluation activities implies that all organizational members, particularly those who will have to implement the eventual decision, are either directly or indirectly involved in identifying problems and decision situations. This evaluation stage may involve defining organizational objectives, determining members' concensus regarding those objectives, and assessing the present performance of the organization in terms of these objectives. The solution generation stage involves the development of suggestions and potential solutions to the problems that have been identified. Innovative as well as traditional solutions may be proposed and considered at this stage. After a preferred solution is identified, the proposed changes are communicated to other organizational members (those not directly involved in evaluation or solution generation activities) who are interested in the problem and/or who would be affected by the change. This internal diffusion stage promotes the

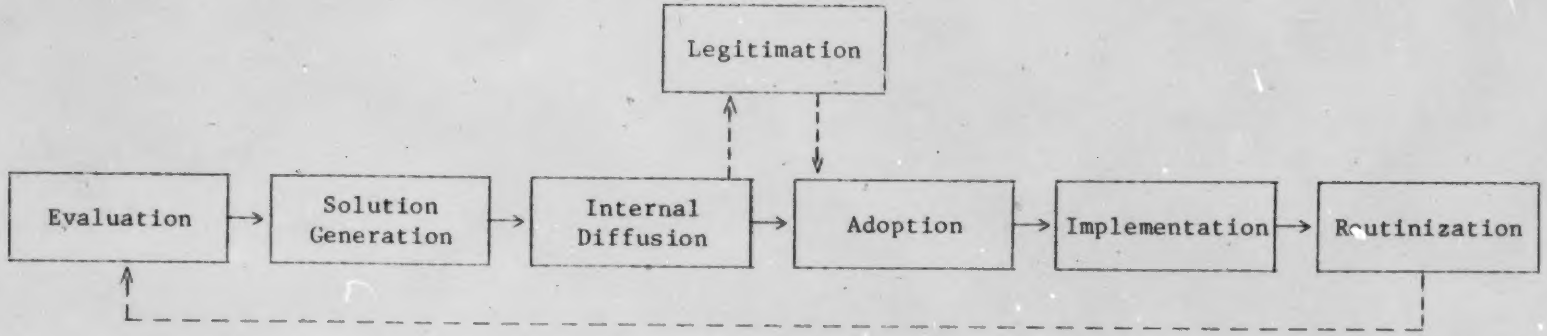
Legitimation
Evaluation
Solution Generation
Internal Diffusion
Adoption
Implementation
Routinization

Figure 1.1. The collective decision process.

participation of all organizational members in the decision process, provides those most directly involved in the decision process with feedback from members with different perspectives, and generates ideas for modifying and improving the solution in terms of quality and acceptability. At the legitimation stage, the proposed solutions are communicated upward and, when necessary, are submitted for the approval of those organizational members who have the formal or legal authority to sanction the decision. When the solution in its "final" form is accepted by organizational members (the adoption stage), plans are made for implementing the change and for preparing the system for the introduction of the new practice or program. The accepted program or activity is put into practice in the organization at the implementation stage. Routinization represents the identifying and solving of problems associated with the change, and the eventual merging of the new program with existing organizational programs and activities. At this point, the change can be evaluated and the collective decision process may begin again.

The collective decision process differs from authority processes in a number of ways. First, evaluation and solution generation activities in authority decisions are initiated and controlled at the top of the organizational hierarchy. These activities, therefore, are directed by members who may be in a more advantageous organizational location to absorb environmental uncertainty than technical uncertainty. Though faculty members may participate in these activities, they may exercise relatively little influence over decisions made through authority processes--even if the decisions involve technical matters. In the collective process, faculty members initiate and control evaluation and solution generation activities, and may do so independently of their organizational superordinates. If technical matters are involved in the decision, collective processes have a greater potential than authority processes for attaining the participation of those members who are most directly exposed to the source of uncertainty.

A second important difference between authority and collective processes is that the former primarily involves downward communication while the latter involves horizontal and upward, as well as downward, communication. Though some upward communication may occur during authority processes (e.g., when problems and solutions are being identified), the most important communication is downward and involves the transmitting of the decision from the decision unit to the adoption unit. In collective processes, upward and horizontal communication are as important as downward communication. Collective processes, therefore, imply a greater use of the potential communication networks in schools and are based on a more complete communication structure.

Third, in the authority process, the decision unit is composed of different members than is the adopting unit. In the collective process, the two units are the same. Though certain collective decisions may have to be sanctioned by superordinates, the adopting unit nevertheless assumes many responsibilities commonly associated with decision units. This suggests another difference between the two processes: collective decision making is likely to involve more members at the various stages of the process than is authority decision making. Collective processes, almost by definition, involve committees and group decision making. This form of decision making implies that committee structures are available to members throughout the organization, and that members' roles include committee decision making activities. This may also imply that collective decision making involves more time than does authority decision making.

Next, adoption probably occurs at an earlier stage in collective than in authority processes. In the former case, some minimal degree of acceptance of a solution or a new program must occur before the idea is communicated upward. In the latter case, adoption cannot begin until the proposal is communicated downward. (Similarly, resistance to change also occurs earlier in collective versus authority decision processes.) This earlier point of adoption may be related to a more complete and efficient implementation of collective decisions. Collective processes, therefore, may be more time-consuming than authority processes at the evaluation and solution-generation stages, but less time-consuming at the implementation stage.

These and other differences do not inherently prevent the simultaneous use of both authority and collective processes in school organizations. Collective processes can be integrated with authority processes through, for example, legitimation activitites. However, the two processes may operate in competition with one another and may be associated with power conflicts, inefficiency, and low morale. Nevertheless, it could be argued that counter-productive conflict in schools may instead be the result of the absence of formalized collective structures. For example, faculty members can informally and collectively "decide" to resist curriculum changes introduced by the district office, "throw a wrench" into teacher evaluation activities, etc.. Informal structures may be sufficiently strong to support resistance to change and counter-productive conflict, but may not be strong enough to support productive conflict or to facilitate the generation of innovative solutions to replace those which have been rejected. It seems, therefore, that formally sanctioned collective decision processes which are carefully coordinated and integrated with authority structures could have the effect of reducing certain types of conflicts in schools.

The Need for Collective Structures in Schools

The contingency theory of school organization presented earlier suggested the need for communication and role structures on which members can rely in carrying out collective, as well as authority, decision processes. Our main argument has been that faculty collective activities are instrumental for reducing technical uncertainty. In the absence of collective structures, certain technical decisions--particularly those that cut across "autonomous" classrooms--may be made by people with insufficient information or may not be made at all. A number of additional observations on educational systems lend additional support for regularized collective decision processes. These observations focus on the limitations of authority structures and concern change advocacy, problem identification, resource utilization, satisfaction with change, organizational capacities for change, and members' satisfaction with their work situation.

First, the authority decision process places change advocacy within the offices of higher-order level personnel, chiefly the principal and superintendent. These individuals may be at a relative disadvantage in initiating change due to the balancing nature of their roles. Spindler notes that the major administrative function "is in large part that of maintaining a working equilibrium of at best antagonistically cooperative forces. This is one of the reasons why school administrators are rarely outspoken protagonists of a consistent and rigorously profiled point of view" (1963, p. 142). Considering this observation and the fact that educational problems and innovations often derive their relevance from larger social systems (such as the state or nation rather than the local community), Gallaher (1965) suggests that the school administration role is not by nature conducive to advocacy functions. Stiles and Robinson add that local social majorities expect school personnel to maintain the status quo rather than bring about change: "educational professionals, by the nature of their employment, are enslaved to the status quo; they are not free to advocate change, except, of course, to keep schools aligned with majority changes in the society itself . . ."(1973, p.259). Institutional and managerial level personnel in educational systems tend to direct reactive rather than proactive organizations; that is, the schools for the most part respond selectively to changes in their environment rather than initiate improvements on their own. Internally-generated change is difficult because it necessitates modifying extremely durable community values and attitudes. It is unlikely that educational administrators, who are expected to assume balancing functions, are in the "right position" to initiate a wide range of changes which counter the culture in which they are immersed. Teachers may be in a better position to introduce changes, particularly if a collective base is available for identifying, promoting, and implementing relevant innovations.

Second, school administrators are poorly positioned within the organization for identifying operational problems and suggesting relevant innovations for meeting technical needs. They may be unaware of certain technical problems in view of the fact that upward communication in hierarchically-structured organizations is often less than adequate. Subordinates sometimes distort information, filter out information potentially objectionable to superordinates, or repress information which could affect them adversely (Erickson & Pederson, 1966). With such inherent limitations in upward communication, administrators and board members are unable to gather relevant information regarding particular types of problems. In some cases, they may not know that certain problems exist; in other instances, they may not have sufficient information to solve the problem effectively or suggest a suitable innovative change. Teachers, however, may have the required information and may be able to (as a group) communicate information upward regarding problems and possible solutions.

Third, authority decision structures fail to tap the problem-solving and change-initiation capabilities of technical core members. This oversight may be especially dysfunctional in schools, because teachers often hold memberships in professional associations and have access to information about innovations in their fields. It has been suggested that properly functioning faculty meetings and "temporary systems" at the lower organizational levels can serve as effective mechanisms for change (Miles, 1965). This change potential may be due to a factor mentioned above--teachers are often in the best organizational location to recognize and specify certain types of problems. Their ability to generate and transmit relevant innovations and new alternatives for particular system needs may also be superior. Additionally, as the number of organizational participants involved in problem specification and solution generation increases, so also does the probability of attaining a sufficient change mass or needed impetus for change.

A fourth point concerns teacher satisfaction with, and acceptance of, authority decisions. Numerous studies have shown that as participation in decision processes decreases, the acceptance of the decision outcomes decreases (Rogers & Shoemaker, 1971; Zaltman, Duncan, & Holbek, 1973). If acceptance is low and "innovation dissonance" is high, the probability that new programs will be routinized successfully in the organization will be minimal. One means for circumventing these problems is to involve teachers through participation in the authority decision process. An additional and possibly more efficient means may be the development and utilization of semi-independent collective decision structures which operate in a complementary fashion with the ongoing authority decision structures.

Fifth, organizations with unilateral power systems may be inherently rigid and inflexible in structuring and functioning. The concentration of decision-making authority in the hands of a few individuals commonly leads to the preservation of the status quo. Decision makers in centralized organizations may act to reaffirm their power by vetoing proposals for change. Elite decision makers, in an attempt to retain their control, may consistently oppose organizational changes which could bring about power equalization (Michels, 1958).

Effective organization change can be restricted in highly centralized systems even if those who hold power are change oriented. Organizational superordinates who are "cosmopolitan" in orientation may initiate selected innovations and support their implementation, even if these programs are not entirely consistent with local needs. The commitment of innovative leaders to particular programs may, in the absence of alternative power structures, restrict the modification of a particular innovation or act against the implementation of alternative programs which are more appropriate for the organization. This type of problem is exemplified by Smith and Keith's (1971) case study of a school converting to a new curriculum designed to individualize instruction. In implementing this innovation, teachers found that the majority of students were incapable of operating within a system based on pupil responsibility. It could be argued that, if bilateral power structures existed in schools, faculty members might respond to this type of situation by (1) initiating a modified individualized program or (2) introducing new programs which could help prepare the students for their new roles.

This interpretation of Smith and Keith's (1971) findings suggests that schools without effective collective structures are unable to alternate between "power centers" from one decision situation to the next. Their findings could also be interpreted to suggest that schools without complementary collective and authority structures are unable to alternate between different sets of procedures and arrangements from one change decision subprocess to the next. Changes introduced at higher-order organizational levels often must be implemented by technical core personnel. Traditional authority structures commonly fail to provide for the mechanisms (at the technical level) which are necessary for the implementation of complex innovations. Control over the implementation process, however, could be switched to and accepted by faculties in schools with ongoing and regularized collective decision activities. Conversely, centralized administrative control over the implementation of faculty-initiated changes may be appropriate in certain situations. Laissez-faire leadership, loose structures, and faculty freedom may fail to support change implementation when teachers must learn new roles and behaviors. Teachers may interpret laissez-faire leadership as a lack of concern rather than as an opportunity to innovate (Fullan, 1972; Smith & Keith, 1971). The presence of regularized procedures and arrangements supporting both authority and collective decision activities permits switching from one structure to the other as required by the change subprocesses.

The ability of faculty members to independently initiate and implement change is, in itself, of great import. However, the major importance of collective capabilities may be that such competencies permit alternation between structures from one decision to the next, from one decision subprocess to the next, and also within change and decision subprocesses (Zaltman, Duncan, & Holbek, 1973).

A final argument for the formalization of collective decision activities in schools concerns teachers' work attitudes. Authority decision activities often fail to include faculty members, and many teachers feel that they have little or no influence over those decisions which directly affect their work. This situation persists even though research has fairly consistently indicated that technical level control is associated with members' satisfaction with their work environment (Mohrman, Mohrman, & Cooke, 1976). Richardson (1970) has found that the actual influence teachers perceive themselves to have on how the school functions is positively related to their attitudes toward important aspects of their work environment. Hornstein, Callahan, Frisch, and Benedict (1968) have found that teachers exhibit the greatest satisfaction with their schools and principals when (1) teachers and principals are perceived as mutually influential and (2) their supervisor's power is based on expertise. Additionally, the technical core control which is frequently associated with teacher satisfaction does not necessarily imply decreased control at higher-order levels. Research conducted by Tannenbaum and his associates has clearly shown that the total amount of control exercised by all organizational members can increase--that is, the amount of control within organizations is not "fixed" (Bachman, Smith, & Slesinger, 1966; Tannenbaum, 1968). Collective decision structures may provide for increased control (total amount of influence) in schools because many technical core problems, decisions, and changes cannot readily be controlled through existing authority processes.

Faculty participation in authority decision activities can potentially increase teachers' sense of power and improve their work attitudes. However, the theoretical framework presented here suggests that faculty participation through collective processes may be a more productive means for increasing technical core members' control. Collective structures can afford faculty members control over those technical decisions and specific change subprocesses which are of interest to teachers and fall within the teachers' sphere of expertise.[1] Selective alternation between two complementary structures, which vary in degree of faculty involvement, should have functional consequences for teacher satisfaction, enthusiasm for their school system, attitudes towards administrators, and acceptance of change (Bridges, 1964, 1967; Chase, 1952).

A Structural Intervention for Schools

Assuming that collective structures are viewed as a viable mechanism for reducing technical uncertainty, the problem becomes one of identifying means for introducing and institutionalizing collective processes in educational systems. One possible strategy for establishing these processes in schools may be a "planned change" or "organization development" approach (Huse, 1973). Applied organizational change strategies can focus on technical, human, or structural aspects of an organization (Leavitt, 1965), and a program centering predominantly on the structure of the system may be particularly relevant to many schools. Such a program potentially could increase the "fit" between the formal structure of the organization and the tasks being performed, the technology in use, and the people performing the work (Nadler & Tushman, 1977). In this section, a structural organization development (OD) program is described which was designed specifically to improve technical level decision making in schools. The major objective of this OD intervention is to superimpose complementary collective decision structures over the existing authority structures of school systems.

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[1] While collective processes may increase teachers' control or influence, it is unlikely that they will increase the autonomy of individual faculty members. Collective processes may actually decrease autonomy if they act to increase horizontal communication and coordination and permit teachers to manage (and increase) their interdependencies. It is not expected, however, that this potential decrease in autonomy would be associated with a decrease in satisfaction. Teachers in many schools may be in the unusual position of having a great deal of autonomy but relatively little influence--a situation which does not necessarily promote satisfaction. By recognizing and coordinating their interdependent efforts through collective processes, teachers can absorb more uncertainty and more adequately control the instructional processes in their schools. To the extent that this increased control leads to higher levels of effectiveness, faculty satisfaction may increase even if their perceived autonomy decreases. Additionally, while potentially decreasing the autonomy of teachers as individuals, collective processes may increase the autonomy of faculty members as a group. This would occur if the faculty were able to use the collective mechanism to buffer themselves from external control.

This structural program differs from other OD interventions in a number of respects and, therefore, it seems useful to preface our description of the program with a discussion of some of these differences. First, the program is not designed to increase subordinates' participation in authority decision making, but rather is designed to provide for decision-making participation through collective structures. Many organization development programs are designed, either implicitly or explicitly, to increase the involvement and influence of faculty members within the context of the existing decision-making arrangements in schools (e.g., Miles _et al_., 1969). Such "top-down" organizational development programs, while potentially useful in many organizational contexts (Bowers & Seashore, 1969), are not consistent with the dual decision structure rationale provided above. The theoretical framework suggests the need for "bottom-up" (or, more accurately, "inside-out") decision making through structures which are separate from but complementary to the existing authority structures. While the introduction of these collective structures may have secondary effects on authority processes, the structural intervention is not designed to modify these processes directly.

Second, the program is not designed primarily to improve interpersonal relations within the context of existing hierarchical structures or peer structures in the school organization (e.g., Alderfer & Brown, 1974). Many OD programs implicitly assume that poor organizational functioning is due to interpersonal process issues; our structural program is based on the assumption that interpersonal relations may or may not be a problem in any particular school. Research on the causes of organizational rigidity in public schools seems to focus on the inadequacy of roles and structures more than the inadequacy of interpersonal relations (e.g., see Hawley's undated review). Our intervention, therefore, was designed to establish collective structures with task-oriented problem solving (Maier, 1968), supported by some interpersonal process components to reinforce the new structures. Thus, interpersonal process issues are not confronted as an existing organizational problem but rather as a component of the intervention design. This structural/task approach is not only consistent with the rationale provided above, but may also be consistent with educators' preferences regarding organizational improvement programs. It is our observation that teachers and administrators may be more willing to participate in task-oriented programs than in "sensitivity" programs, which may seem to them to be unrelated to school problems.[1]

A third difference between this and other OD programs is that the structural intervention does not involve external change agents spending large amounts of time within the client organization to provide process guidance or consultation. The collective decision intervention was designed to minimize the time required of outside consultants for two reasons. First, the rationale underlying the intervention emphasizes the need for new structural arrangements within schools. It is unlikely that this need can be met by placing a skilled consultant within a district to facilitate processes for some finite period of time. Though system members may pick up some of the consultant's skills, they may become dependent on the change agent and may be inadequately prepared to carry on the change efforts after the external agent leaves the system. The collective decision intervention, therefore, is designed to instill in system members the capabilities to conduct collective decision processes on their own. The consultants never conduct or guide these processes themselves, but rather invest their time in transferring skills which could help system members to establish and institutionalize new structures. The second reason for this approach is more pragmatic. By training system members and limiting the direct involvement of external change agents, the expenses associated with the collective decision intervention can be kept low. Change programs which require significant investments of time on the part of external consultants (and system members) are simply beyond the reach of many school districts. The collective decision strategy, therefore, may be within the means of districts which need improvement but are unlikely to allocate resources for a more expensive program. While this intervention might be insufficient to overcome problems which can only be solved by significant amounts of money (e.g., critical technological or interpersonal problems), it may nevertheless improve the utilization of existing financial and human resources and ameliorate certain technical-level problems.

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[1] While our program was not primarily interpersonal in orientation, it does provide a mechanism by which school members might deal with a poor interpersonal climate. As will be discussed later, surveys are used in the intervention to assist teachers in identifying school problems. School members, therefore, may identify interpersonal relations as a problem and attempt to solve this type of problem. The intervention, however, does specify *a priori* that interpersonal relations should be considered the underlying cause of organizational rigidity or ineffectiveness.

The Intervention

The structural/task intervention is comprised of a number of OD components, each of which is intended to support one or more stages of the collective decision process outlined above. The major components of the program include survey feedback for problem identification and the stimulation of interest in change, task-oriented problem solving for the generation of innovations and solutions to problems, and collective decision structures and roles for the communication, legitimation, and implementation of changes. The program relies heavily on (1) the training of organizational members to lead and monitor problem-solving activities and (2) an overlapping group structural configuration to sustain change in the organization.

The intervention is, in principle, initiated and undertaken with the knowledge and consent of members at all levels of the school district. School personnel are provided with an overview of the intervention, including a statement of the rationale underlying the program, a description of the major components of the intervention, and a description of the roles that various members of the system would assume in carrying out the program. The intervention is implemented in a school building only if a majority of the members vote in its favor.

At the beginning of the intervention, system members are asked to serve on one or more groups: the Program Group, the Review Committee, and the Policy Committee. These overlapping groups (see Figure 1.2), acting in concert, are designed to superimpose a collective decision-making configuration over the existing authority structure of the school and the school district. The Program Group consists of all faculty members within a school. This group, and the program in general, is run by a program leader and a program monitor elected by the

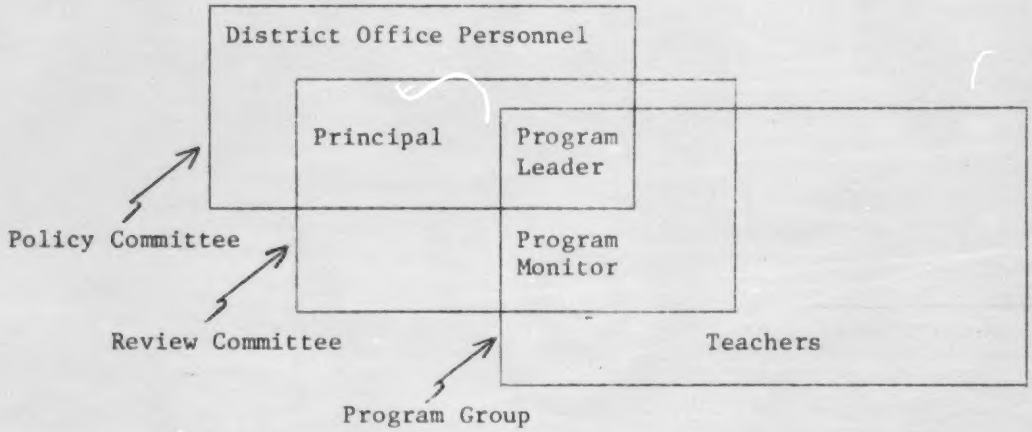
District Office Personnel
Principal
Program Leader
Program Monitor
Teachers
Policy Committee
Review Committee
Program Group

Figure 1.2. Diagram of the overlapping groups.

teachers. The functions of this group include interpreting the results of a task-oriented survey administered to the group, identifying faculty problems, determining what action can be taken to alleviate problems, and communicating problems and recommendations upward to the Review Committee and implementing changes. The Review Committee operates at the school level and includes the principal, program leader, program monitor, and another member designated by the principal. The functions of this committee include sanctioning Program Group recommendations, suggesting improvements for the solutions generated by the group, explaining why certain solutions cannot be implemented, and communicating information upward to the Policy Committee and downward to the Program Group, when necessary. The Policy Committee operates at the district level and includes the Superintendent, principal(s), and program leader(s). Policy Committee functions include responding to questions, suggestions, and recommendations coming from the Program Group via the Review Committee, approving changes, and explaining why particular changes cannot be implemented.[1] (See Table 1.1.)

The elected program leaders serve as key members on all three committees. These teachers are provided with an intensive three-day training experience to prepare them for their "linking" roles. The training sessions focus on the administrative components of the program, change processes, conflict, survey feedback, communication skills, group behavior, group problem solving,

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[1] The overlapping group structure described here is designed for elementary schools. The structure for secondary schools involves multiple Program Groups and a coordinating committee for program leaders. Also, the group structure outlined above is intended to facilitate problem solving and decision making at the faculty level. Similar collective decision groups, however, can be established to promote collective decision making by principals. Collective processes at the principal level may be useful not only for solving managerial problems, but also for familiarizing principals with the problem-solving process to be used by the faculty.

Table 1.1

Committee Membership and Activities

Group (and Composition)	Functions
Program Groups (program leader, monitor, and faculty of the school)	1. To interpret survey results for their own group.
	2. To identify the group's key work problems and needs.
	3. To diagnose the basic reasons and causes underlying work problems.
	4. To determine what action can be taken at the school level in solving problems and meeting needs.
	5. To discuss problems and possible solutions with other members of the system who might be affected by the problem or proposed changes.
	6. To communicate to the Review (and/or Policy) Committee the group's thinking and recommendations regarding alternative proposals for solving problems and meeting needs.
	7. To obtain from the Review (and/or Policy) Committee reasons and explanations for existing top-level policies, programs, procedures, thinking, and action.
	8. To plan for the implementation of solutions.
Review Committee (principal, program leader, and monitor)	1. To plan and schedule survey administration, feedback, and problem-solving meetings.
	2. To approve changes and innovations proposed by the Program Group.
	3. To explain why proposals for change cannot be approved and to suggest modifications of proposals for further consideration.
	4. To facilitate upward and downward communication between the Policy Committee and the Program Group.
Policy Committee (superintendent or district representative, principal, and program leader from the school(s) interested in the particular problem)	1. To respond to questions, suggestions, and recommendations of Program Groups.
	2. To sanction and suggest changes in innovations emerging from Program Groups.

and the use of the special forms and documents designed to facilitate the collective decision process. The group monitors also assume a central role in the program and are provided with training on how to monitor and record the activities of the Program Group. This training includes an overview of the intervention, a review of the problem diagnosis and solution process, a presentation on group dynamics, and lectures and exercises on how to complete the group observation and communication forms. Building principals, another group central to the success of the program, are provided with a day of training. This training is intended to familiarize the principals with the faculty decision-making structure and to prepare them to solve problems and make decisions as a Principal Group.

Details regarding the practical aspects of the structural/task intervention are presented throughout this monograph and, in particular, in Chapter Five, which focuses on the training. In the remainder of this chapter, the intervention will be reviewed at a general level, along with the rationale underlying the key aspects of the program. The following discussion of the program and its major components is organized in terms of the seven stages of the collective decision process.

Evaluation. The evaluation stage, and the collective decision process in general, is initiated through the use of survey feedback procedures. A task-oriented questionnaire, the School Feedback Survey, was designed specifically for teacher problem solving and for this intervention. The questionnaire is based on an earlier instrument, the School Survey, developed by Coughlan (1966). This lengthy survey, which focuses on teacher attitudes and opinions toward important aspects of their work environment, can be supplemented by questions proposed by members of the client organization. While the use of a standardized survey may minimize the participation of client system members at this early stage of the process, standardized instruments offer important advantages, particularly when used by multiple groups or organizations simultaneously (Coughlan & Cooke, 1974). In particular, members of each system can be provided with their own group's scores as well as mean scores for all the groups surveyed. These two sets of scores enable the group members to make meaningful comparisons and to identify potential problem areas.

The focal unit for data feedback and problem identification is the faculty or "natural work group." In elementary schools, this group may consist of all teachers; in high schools, these groups may be formed along departmental lines. Feedback at the group, rather than the individual, level is preferred because groups provide a greater potential for wider, experience-based contributions to problem solving, the general recognition by all members of shared problems, the pooling and sharing of information which facilitates solution generation, and the development of mutual expectations to implement decisions agreed upon by members (Mann & Likert, 1952). While the group approach is useful, these groups may have to be "created" in many schools since faculty members often do not see themselves as belonging to any type of cohesive unit.

The Program Groups which are established as part of the intervention include only faculty members. Thus, data collection, feedback, and problem solving are carried out in peer groups (Katz & Kahn, 1966) rather than "family groups," which would include a superordinate (Likert, 1961). The membership of the Program Group is based on the findings and recommendations of Bridges (1967); hierarchically-differentiated family groups may create barriers for subordinates in open communication and creative problem solving. Additionally, a group composed of faculty members is consistent with collective processes which focus on technical decisions.

We expected that teachers' acceptance of and satisfaction with the data would be greater if presented by an elected group leader rather than by a hierarchical subordinate, an internal staff specialist, or an external consultant. In particular, data may be seen as more credible if presented by a group member instead of a dissimilar "outsider" (Giffin, 1967). A day of the training is devoted to familiarizing the elected leaders with the data and feedback techniques. Emphasis is placed on developing the leaders' competency with the data, since this has been shown to be associated with group satisfaction and perceived utilization of data (Klein, Kraut, & Wolfson, 1971). Klein and his colleagues also have found that data feedback presented orally during group meetings, in contrast to written feedback, results in higher satisfaction with and perceived utilization of the information. Thus, program leaders are provided with techniques to discuss the data and with feedback charts and forms to supplement their presentations.

Members of each Program Group receive feedback concerning their own school's scores profiled against the average scores for similar schools and groups. This convention is based on the expectation that members would be more interested in, and better able to utilize, data for their individual schools than data for higher level or more inclusive groups (such as the entire school district). These profiles of constrasting scores enable group members to quickly identify positive or negative discrepancies between their own school and other, similar, organizations. These discrepancies can motivate members to clarify their objectives, generate solutions to problems, and implement those solutions (Nadler, 1976). Additionally, the data feedback permits members to compare their own attitudes to those of the group. If members' own attitudes are not corroborated by the data, constructive inquiry may be stimulated and important issues for group discussion can be identified (Miles et al., 1969).

Preliminary data discussions focus on defining the importance of the problem areas identified by the survey feedback. As teachers concentrate only on those problems of consequence to them (and as other problems are handled through authority decision processes), group members should be interested and motivated to participate in the problem-solving process. The program leaders are advised to have their groups specify problems precisely, define underlying reasons and causes, and develop specific change goals. Problems are to be broken down into sub-problems (Maier & Maier, 1957) and analyzed at the role, inter-role, and organizational levels.

Solution generation. If Program Group members do not feel competent to solve certain problems, relevant information is to be communicated to the Review Committee for problem solving and decision making through authority processes. For those problem areas within the teachers' sphere of expertise, the Program Group moves on to solution generation activities. As during the evaluation stage, the program leader's role is to facilitate task-oriented communication without necessarily emphasizing the subjective elements of group interaction such as those which are the point of focus in sensitivity training. The teachers are encouraged to be "objective" and factual--to approach problems in terms of situations, not behaviors or personalities, and in terms of difficulties to be overcome and goals to be achieved. The assumption is that teachers will be more willing to discuss inter-role than interpersonal problems and that the leader will be in a better position to facilitate these task-oriented interactions.

Program leaders are provided with a set of "ground rules" for guiding Program Group meetings. The guidelines are designed to effect creative problem solving, to retain a task orientation, and to standardize faculty decision-making processes. For example, attempts are made to have all group members contribute to the discussion, to avoid conformity effects, and to defer solution generation until various interpretations of the problem have been explored. Faculty members are asked to say "perhaps the group feels this way . . ." rather than "I feel this way . . ." to keep the discussions on a less personal level. Similarly, group members are encouraged to use job titles or organizational functions to be performed rather than names of individuals. Problems are to be worded and suggestions offered in the form of positive statements. The Program Group is encouraged to identify a number of possible solutions for each problem and to withhold final selection until a number of alternatives have been discussed and carefully reviewed (Maier & Hoffman, 1960). Also, program leaders refrain from evaluating members' contributions as "good" or "bad" whenever possible.

After all alternative solutions are evaluated, the group selects what it perceives to be the "best" course of action. This includes steps to be taken at the school level within the purview of faculty authority as well as those recommendations to be communicated to the Review Committee for approval. A timetable is kept of the action programs initiated for each problem, including starting dates, a schedule for interim reports, and a completion date. Minutes are taken by the group monitor, who records the ideas expressed during the meetings. The names of the group members proposing the ideas are excluded from these minutes. Members are invited to review the minutes to ensure that they accurately reflect the group's thinking. The purpose of these procedures is to formalize the informal teacher work group and to provide a basis for ongoing collective decision activities. These procedures and guidelines are kept task-oriented to reduce personal threat and anxiety and to minimize the social and psychological costs of suggesting new alternatives. By reducing the costs of proposing changes, the guidelines for solution generation are expected to alter the "innovation boundaries" of the Program Group members, that is, to make it more likely that they will choose to try new things (Slevin, 1972).

Internal diffusion. Though schools have sometimes been characterized as "loosely-coupled" systems (Weick, 1976), the interdependencies within these organizations become highly apparent when changes are introduced. Innovations being initiated and implemented by one group in a school invariably have direct or indirect implications for other groups. Nevertheless, the apparent interdependencies among school personnel in terms of their impact on students, their use of resources, etc. are rarely complemented by communication and control networks to coordinate these interdependencies. This structural deficiency acts to inhibit problem solving and change initiation in two important ways. First, the dissemination of new ideas throughout the organization is limited and this implies that certain members may be unaware of changes or may not sufficiently understand them to cooperate in their implementation. Second, the changes that are proposed may be initiated by members with a particular perspective and may be unresponsive to the needs of other members. This implies that many changes will not be fully adopted by members throughout the organization or may be actively resisted by groups who did not participate in the change initiation process.

This structural intervention is specifically designed to improve communication in schools and to promote the internal diffusion of new ideas. The Program Group meetings provide an important vehicle for communication and, in a properly functioning group, much of this internal diffusion should occur during the evaluation and solution generation stages. For example, the program leader training emphasizes the need to have problems defined from as many perspectives as possible, to gain the inputs of "quiet" as well as "vocal" members, and to develop detailed statements of problems and potential solutions to promote members' awareness and understanding of possible changes. Nevertheless, many changes proposed by the faculty will have implications for personnel in (or outside) the school system who are not members of the Program Group. Since effective completion of the diffusion stage involves discussing problems and solutions with all relevant personnel, the program guidelines prescribe that special efforts be made to gain the participation of those outside the group who might be interested in the change. Representatives of the Program Group can be made responsible for contacting others or, preferably, these people can be invited to a Program Group meeting. These expanded meetings are to be used not only to advise other school personnel of problem situations and possible solutions, but also to gain their perspective(s) of the situation and their insights regarding alternative solutions. The objective, therefore, is to improve the changes being proposed as well as to gain acceptance of the changes. To facilitate this process, program leaders are briefed on the issues of resistance to change and conflict resolution during their training. The leaders are also advised on the importance of creating a climate for disagreement which will permit innovation without instilling hard feelings (Maier & Hoffman, 1965).

The internal diffusion process becomes more difficult to carry out if the solutions being considered by a Program Group have district-wide implications or if two or more groups are simultaneously dealing with the same problem. The intervention includes a Program Leader Group which can be used to identify and to deal with these situations. During these meetings, the program leaders can exchange information regarding problems and solutions which are relevant to schools throughout the district. The leaders then provide their own groups with feedback concerning the attitudes, perceived problems, and ideas of other Program Groups. Following these school-level meetings, the leaders reconvene to modify proposed solutions to better fit the needs of the entire organization. Though the different organizational contexts of the various schools within a district may make it difficult to identify changes which are acceptable throughout the system, the program leaders should be prepared to deal with such problems given their training and experience in group problem solving.[1]

Legitimation. Collective structures can be considered "complementary" only to the extent to which they are integrated with authority structures. Given the legal structure of school systems, the authority to make most decisions (including many which might be of concern to the Program Group) is vested in the school board or its administrative representatives. Therefore, certain decisions which the faculty is competent to make have to be approved by administrators or, alternatively, operational authority over the decisions must be formally delegated to the faculty group. These legitimation activities may be necessary even in the absence of legal constraints. Rational decision making in organizations requires that decisions be made in consideration of all relevant environmental constraints and contingencies--regardless of whether they are technical or institutional in origin. Through collective processes, faculty members may focus on technical sources of uncertainty and may inadvertantly neglect or selectively filter out certain institutional sources. The opposite may be true for administrators operating within the authority structure. Consequently, these two differentiated decision-making structures or subsystems must be properly integrated if the organization is to adapt effectively to its environments (Lawrence & Lorsch, 1969).

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[1] Similar difficulties with the diffusion process would arise in secondary schools where Program Groups were organized along departmental lines. An effective program in a secondary school would therefore require a program leader committee or similar type of group for interdepartmental communication and coordination.

Our program relies on the overlapping group configuration (described above and in Chapter Five) to achieve integration and legitimation. This group structure provides a mechanism for the legitimation of Program Group proposals (and for the "collective legitimation" of administrative proposals). The legitimation process is initiated through the Review Committee meetings which are attended by the program leader, principal, program monitor, and another member designated by the principal. At these meetings, committee members discuss the problems and possible solutions identified by the faculty group. Recommendations are either approved, rejected, or modified at the Review Committee level. (Suggestions which have district-wide implications are sent to the Policy Committee for consideration.) In the case of rejection at the Review Committee level, the principal in encouraged to explain why the proposal is unacceptable and how it might be modified to increase its feasibility. Program leaders are then responsible for communicating the reasons for rejection and proposed modifications to their Program Groups. The faculty members then can re-formulate their proposals on the basis of this new information and re-submit them to the Review Committee.

The overlapping group structure sets the stage for legitimation and structural integration by providing the potential for more effective vertical communication. First, the intervention enhances subordinates' ability to interact constructively with superiors by focusing on communication between groups rather than individuals (see Jackson, 1959). This group orientation should counteract many of the natural barriers to effective upward communication in organizations (Festinger, 1950; Katz & Kahn, 1966). Second, the transmission of underdeveloped and inconsistent statements of problems by individual teachers is replaced by documented statements of carefully analyzed problems and possible solutions. Third, problems are stated in impersonal and task-oriented terms; organizational titles are used rather than names; and unconstructive criticism and negatively-worded statements are avoided. These factors can minimize defensive reactions and increase the likelihood that the information will be accepted and acted upon. Downward communication should also increase in relevancy and efficiency as feedback from the Review Committee focuses on those policies directly related to problems identified by the faculty. Finally, communication channels will be used more effectively as faculty members learn what types of changes they can implement without going through the Review Committee.

Adoption. There should be relatively high faculty acceptance of solutions and innovations generated through the collective process. The program guidelines necessitate a minimal level of acceptance at the early stages of the process--general group consensus is required before the idea is diffused horizontally and communicated upward for legitimation. Higher faculty acceptance of changes, as well as greater organizational innovativeness, is expected as a result of the increased member involvement in decision processes and the increased group interaction implied by the intervention. As teachers take part in decision-making activities, their understanding of the problem, influence over the decision, and awareness and understanding of selected alternatives increases. Increased interaction among the faculty group possibly broadens the organizational perspective of members, increases the exchange of ideas between heterophilous individuals, and speeds up the diffusion of new ideas within the school. These factors, along with members' perceptions of group commitment and consensus, should heighten the acceptance of and the innovativeness of faculty decisions (see Havelock, 1969; Rogers & Shoemaker, 1971; Zaltman, Duncan, & Holbek, 1973).

While such factors can account for faculty acceptance of the solutions generated in the Program Group, adoption is concerned with teachers' acceptance of the solution in its final form--after legitimation and possible modification. We anticipated that faculty acceptance would remain high after solution modification with effective vertical communication increasing their understanding of the problem area and related organizational constraints. Similarly, these solutions also should be accepted by administrators to the extent that their viewpoints are incorporated into the decision-making process. The assumption is that undistorted and objective vertical communication can bring about consistency across organizational levels regarding members' attitudes toward problems and preferences for alternative solutions.

The adoption stage reflects the final planning for the change and the preparation of the system for implementation. Preliminary planning will have already taken place as, for example, the logistics of alternative solutions are studied to determine relative feasibility. For final planning, program guidelines recommend the formation of a subcommittee to deal with the proposed changes in greater detail. Specific group members are assigned responsibility for defining needed resources for implementation and for exploring the consequences of the change. A timetable for implementation is developed which assigns who is to do what by when, thus firming up starting, interim progress checks, and completion dates.

Implementation and routinization. The intervention and the collective process are designed to counteract the tendency for innovations, ideas, and plans to "evaporate" in educational systems. We expected that the implementation of new programs and procedures would be facilitated by the process of intra-group cooperation and personal and group commitment. The formalization of each group decision as an "Action to Take" and the scheduling of faculty activities should also promote implementation. Group monitors carefully record each decision outcome and the specific action for which each member is responsible. In this way, "the changed beliefs are removed from the area of good intentions to the realities of everyday behavior" (Katz & Kahn, 1966, p. 402). Furthermore, scheduling and the setting of deadlines should increase members' propensity to engage in the non-routine change activities (March & Simon, 1958). Implementation of collective decisions can also be accomplished by "switching" to the authority structure at this stage. Implementation through authority processes taps both the managerial expertise and the advantageous organizational location of administrators for effecting changes. Whether implemented through collective or authority processes, a high proportion of the initiated changes should be routinized if members are sufficiently committed to working through any unanticipated problems resulting from implementation.

A major responsibility of the Program Group at the routinization stage is to follow up on faculty initiated changes. The program leader, or a specially commissioned subcommittee of the Program Group, assumes responsibility for periodically evaluating the extent to which recommendations have been implemented and the degree to which new programs or procedures have alleviated problems. Failure to solve a particular problem indicates that the area must be singled out for further intensive analysis. This analysis involves renewed evaluation or problem identification activities and therefore implies a "recycling" of the collective decision process.

Follow-up activities implicitly include the evaluation--by Program Group members--of the intervention's effectiveness. This evaluation should be favorable to the extent that the collective decision process and group recommendations are successfully implemented. We anticipated that the collective process would be perceived by organizational members as sufficiently meaningful to (1) ensure the continuation of faculty problem-solving activities and (2) bring about a reinforcement of change supporting norms. Reflection on group problem-solving processes should act to reinforce norms supporting the "communication of information" and "collaborative action" (Miles et al., 1969).

The internalization of problem-solving guidelines by organizational members, the use of vertical communication linkages on an ongoing basis, and the acceptance of new collective decision roles should contribute to structural changes in the school. The intervention will attain its immediate objective--i.e., to promote structural change--only to the extent that relatively stable organizational arrangements and procedures for collective decision making emerge in the target school(s). These collective structures are expected to promote faculty members' participation in critical school decisions. This participation, in principle, should imply increased uncertainty absorption within the school and should have an impact on the way in which jobs are performed, the way in which resources are allocated, etc.. These effects, in turn, are expected to increase the effectiveness of the system and the satisfaction of system members--the ultimate objective of the OD program.

In the remainder of this report, a field experiment is described in which this structural intervention is implemented and evaluated in a school system serving a medium-sized midwestern city. This school district is described in the next chapter along with a review of our entry into the system. Chapter Three presents the design, hypotheses, and methods for evaluating the program's impact in this district. Chapter Four focuses on the differences between the schools in this district which adopted vs. those which rejected the intervention. The implementation (e.g., training program) of the intervention is reviewed in Chapter Five. The remaining chapters focus on the evaluation of the intervention and the implications of these findings for future OD programs. Our presentation of the intervention and its evaluation will be organized around an "abbreviated" model of organizations as open systems. This model, therefore, will be briefly reviewed in the final section of this introductory chapter.

An Open Systems Model of Organization
for the Assessment of the Intervention

The experimental implementation of the structural intervention will be described and evaluated, in the chapters which follow, within the context of an open systems model of organizations. An open systems perspective was assumed for this evaluation research since the theoretical framework underlying the intervention itself is based on this perspective. The abbreviated model to be outlined here--while consistent with the theoretical framework--highlights a selected subset of concepts, variables, and relationships which can provide the basis for a manageable, yet theory-based, evaluation of the intervention. In presenting this model, specific conceptual constructs and their respective operationalizations will be grouped together. These "categories" of variables will be used throughout this report in discussing the intervention and the findings of its evaluation.

Figure 1.3 presents the abbreviated open systems model and the several major groups, or categories, of variables on which the evaluation focuses. As discussed in detail at the beginning of this chapter, environmental components and variables are central to the open systems approach (and thus to the intervention and its evaluation). Similarly, organizational structures and processes--both of which may be influenced by environmental forces--are considered in this model. Organizational structures and processes are directly and indirectly related to numerous sets of "throughput" variables, two of which are included in this model: patterns of resource allocation and participation in decision making. Structures and processes also are related to various sets of output or outcome variables. Two such sets of variables are highlighted in this model and the evaluation which follows: the effectiveness of the organization in terms of goal achievement and the integration of the organization and its members. (Also depicted in the figure is the intervention in relation to the categories of variables on which it is expected to have a direct impact.) A complete breakdown of the variables included in this model is presented

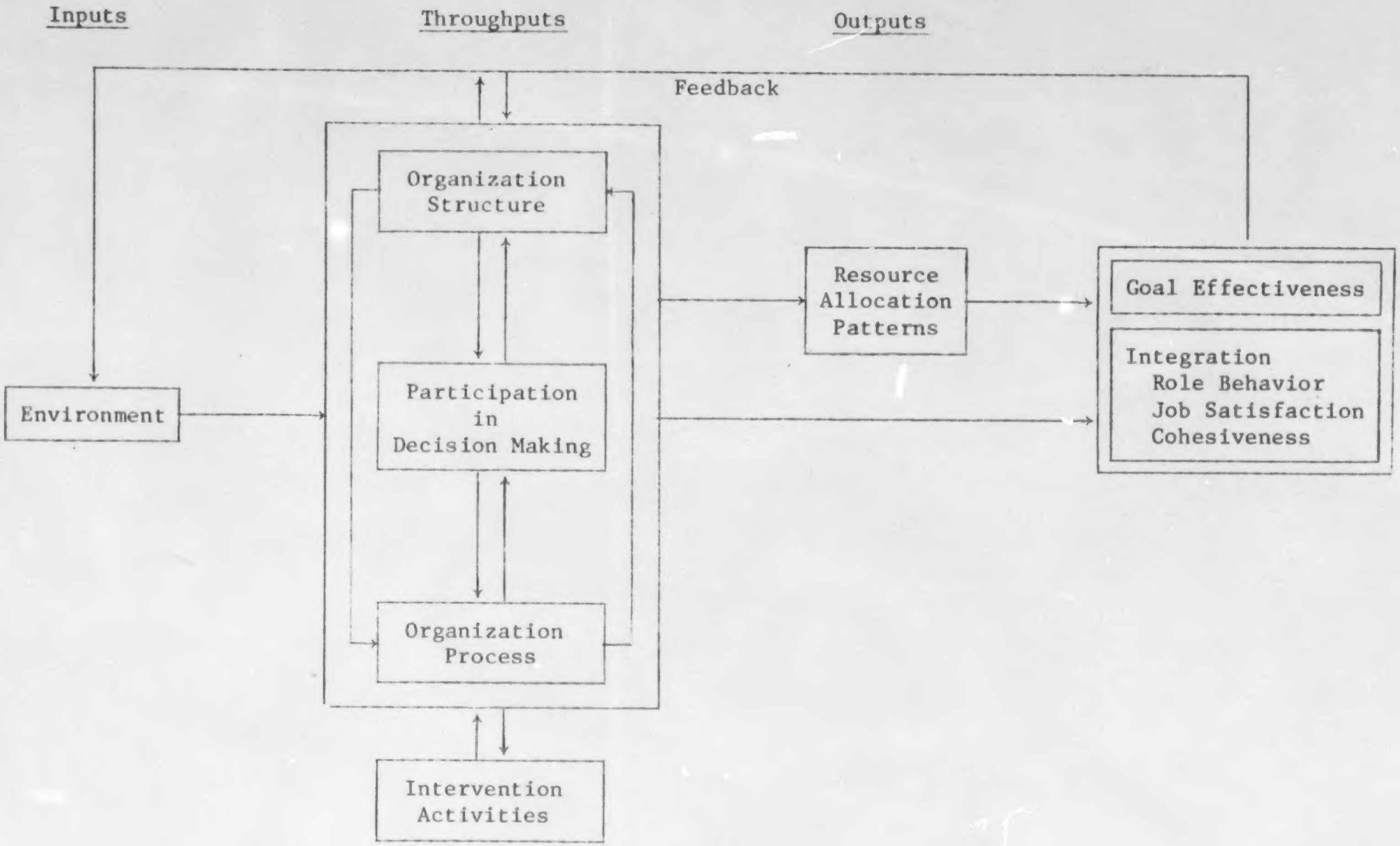

Inputs
Throughputs
Outputs
Feedback
Organization Structure
Participation in Decision Making
Organization Process
Intervention Activities
Environment
Resource Allocation Patterns
Goal Effectiveness
Integration
Role Behavior
Job Satisfaction
Cohesiveness

Figure 1.3. An open systems model of the organization.

in Chapter Three (see Table 3.4). For the purposes of this introduction, we present an inventory (Table 1.2) and a brief conceptual discussion of these variables.

The Environment

The environment consists of those factors or forces which organizational members consider when making decisions (Duncan, 1972). This evaluation focuses on those environmental components that teachers and principals typically feel have an influence on policies and programs in their schools. These components were identified by reviewing the literature which considers the environment of educational systems (e.g., Campbell *et al*., 1970; Carlson, 1975) and by considering the results of a pre-test survey which included a lengthy list of possible environmental forces. The ten entities comprising our final inventory of environmental components are: students, teachers, principals, central office, board of education, parents, the American Federation of Teachers (AFT), state government, and community agencies (police, fire, etc.). This inventory, therefore, includes components which may contribute to uncertainty in the institutional environment (e.g., the state government) as well as components which may contribute to technical uncertainty (e.g., the students). As indicated in Table 1.2, the variables to be considered in this evaluation concern the *influence* of each of these components on school programs and policies.

Organizational Structure

Organizational structure is considered in the evaluation model of two levels of analysis: the organizational system and organizational member levels. At the organizational system level, structure consists of two

Table 1.2

Variable Components of Systems Model of School Organization

Environment

Influence on school policy and programs from each of a number of environmental entities

Organization Structure

- Standardization
- Autonomy
- Variety
- Hierarchy of authority

Organizational Process

- Problem-solving process
  1. Evaluation
  2. Solution generation
  3. Internal diffusion
  4. Legitimation
  5. Adoption
  6. Implementation
  7. Routinization

Participation in Decision Making

- Actual participation in policy decisions
- Should participate in policy decisions
- Actual participation in operational decisions
- Should participate in operational decisions

Resource Allocation Pattern

Amount of attention and resources given to each of a number of organization goals

Organizational Effectiveness

Effectiveness with which organization achieves each of a number of goals

Integration

- Role behavior
  - Role overload
  - Role ambiguity
- Job satisfaction
  - Intrinsic satisfaction
  - Contextual satisfaction
- Cohesiveness

variables which have been shown to be distinct dimensions by Pugh and others (1968). Standardization, or the structuring of activities, refers to the extent to which there are specifically defined rules and procedures to be followed when carrying out organizational activities. The concentration of or hierarchy of authority refers to the degree to which authority and responsibility are centralized in relatively few offices or roles within the school system (Aiken & Hage, 1968; Hall, 1977). At the level of the organizational member, "structure" consists of two variables which generally are viewed as important job characteristics: autonomy and variety (Porter, Lawler, & Hackman, 1975). Autonomy refers to the flexibility the individual members have in carrying out their jobs. Variety refers to the extent to which diverse and non-routine activities are associated with the members' jobs. While these task characteristics are typically viewed as individual or role level variables, they are largely a reflection of organizational system structured characteristics and provide a complementary means for assessing these characteristics.

Organizational Process

In this study, the key organizational process we focus on is the seven stage decision-making or problem-solving process discussed earlier. This process was conceptualized by Coughlan and Cooke (1974) as including the following phases: evaluation, or the collective identification of organizational problems by members at the technical level of the organization; solution generation, or the formulation of solutions to identified problems; internal diffusion, or the communication of possible problem solutions throughout the school system to those potentially affected by the solution; legitimation, or the sanctioning of solutions, when appropriate, by organizational members with legitimate (official or legal) power; adoption, or the acceptance of the problem solution and the planning for its implementation; implementation, or the initial installation of the solution into the ongoing activities of the school system; and routinization, or the merging of the solution with existing organizational roles and procedures. The evaluation model focuses heavily on this seven-stage process since the intervention was explicitly designed to facilitate and support collective decision-making or problem-solving activities in schools. (During this intervention, this process was presented to school members as the "seven-stage problem-solving model;" this process will therefore be referred to as a problem-solving, rather than as a decision-making, process in subsequent chapters.) The variables of interest here concern the extent to which the various phases of this process are successfully performed in schools.

Participation in Decision Making

Participation in decision making in educational organizations has been studied extensively by Alutto and Belasco (1972, 1973). They have identified twelve areas of decision making relevant to school organizations:

1. hiring new professional personnel
2. selecting specific instructional texts
3. resolving learning problems of individual students
4. determining appropriate instructional methods and techniques
5. establishing general instructional policies
6. establishing classroom disciplinary policies
7. planning school budgets
8. determining specific professional assignments

9. resolving employee grievances
10. planning new buildings and facilities
11. resolving problems with community groups
12. determining professional salaries

Our evaluation model focuses on these same decision areas to preserve the continuity of the line of research initiated by Alutto and Belasco. In addition, these twelve decision areas are relevant to this intervention because they encompass both technical decisions (potentially relevant to collective processes) and managerial/institutional decisions (potentially relevant to authority processes)(Mohrman, Mohrman, & Cooke, 1976). The variables of interest here are the actual participation and the desired ("should") participation of teachers in each of these decisional areas.

Resource Allocation Patterns

Ten school organization goals were identified through an extensive review of the literature. The ten goals or objectives which seem to be most relevant to educational systems include:

1. to develop highly qualified staff
2. to implement comprehensive and integrated instructional program
3. to provide positive and supportive school environment
4. to provide ongoing evaluation of school programs for modification and development
5. to experiment with educational innovations
6. to be responsive to community
7. to communicate to public objectives and results of school programs
8. to promote educational achievement of minority students
9. to coordinate school activities with relevant community groups
10. to lessen disciplinary problems

In the resource allocation area we were concerned with the teachers' perceptions of how much attention and resources each of these goals received. This category of variables--focusing on the way in which school personnel, funds, and equipment are utilized--will reflect the outcomes of some important problem-solving processes (around resource allocation, adaptation, etc.) which take place in schools. These variables are included in the evaluation model because changes along these variables would be expected to the extent that the intervention affects problem-solving processes and the sources of uncertainty which are considered in decision making.

Organizational Effectiveness

Systems models of organizational effectiveness tend to focus on such criteria as the ability of the organization to maximize or optimize its resources (e.g., Katz & Kahn, 1966). While such criteria would be consistent with the systems approach assumed for this evaluation, it is unlikely that any organizational development program would improve effectiveness in this way within the time frame of this experiment. Therefore, our model includes criteria which are more goal-oriented and short-range: perceived goal effectiveness and integration. These two dimensions of organizational effectiveness and health are among those which are most frequently discussed in the organizational behavior literature (Miles, 1965; Schein, 1970). In our model, goal effectiveness is viewed in terms of teachers' perceptions of their schools' ability to effectively achieve the ten goals identified above. Integration is viewed in terms of three variables which reflect, or which are related to, the extent to which teachers perceive themselves to be integrated into the school organization:

(1) role behavior, or the extent to which participants understand their role (i.e., do not perceive role ambiguity) and do not feel that too many demands are being made on them (i.e., role overload)(Kahn et al., 1964); (2) job satisfaction, or how individuals feel about their experience in their school (Porter & Lawler, 1968); and (3) cohesiveness, or how attracted or attached the teachers are to their work group in their school (Cartwright, 1968).

The Intervention and Its Expected Effects

As discussed earlier in this chapter and as illustrated in Figure 1.1, the intervention is expected to have a direct impact on the organizational process and participation in decision-making variables. The intervention, through the survey feedback process, focuses on identifying and then solving school-related problems. Thus, the expected immediate effect of this intervention is that teachers will perceive a greater involvement in the problem-solving process. Also, as a result of the Program Group activities, the intervention is likely to lead to more evaluation, solution generation, internal diffusion, legitimation, adoption, implementation, and routinization. Since the intervention also has structural components its implementation should have a direct effect on the schools' structure.

The intervention is expected to have an indirect effect on the other variables included in the abbreviated open systems model of organizations. The intervention, by establishing a supplemental problem-solving process through the Program Groups, might affect the amount of attention and resources allocated to the various goals and objectives of the school. In addition, the intervention should have an indirect effect on the organizational effectiveness of the school. As a result of the increased efforts in problem identification, problem solving, and solution implementation, the school should eventually become somewhat more effective in achieving its goals. It is also expected that the intervention may indirectly improve satisfaction as a result of increased involvement of teachers in school affairs. It is less clear as to what indirect effects the intervention might have on role behavior. (For example, role overload could increase if the intervention requires teachers to take on more responsibilities as they participate in the Program Groups or could decrease if the problem-solving activities provide a mechanism for reducing role overload due to other activities.) It is expected, however, that participation in the Program Groups will increase cohesiveness. Finally, the implementation of the OD program should eventually have an (indirect) effect on the influence patterns which environmental entities exert on the schools, although this may be a change more remote in time than the duration of our intervention.

CHAPTER TWO

THE FIELD SETTING AND ENTRY

Setting

The City

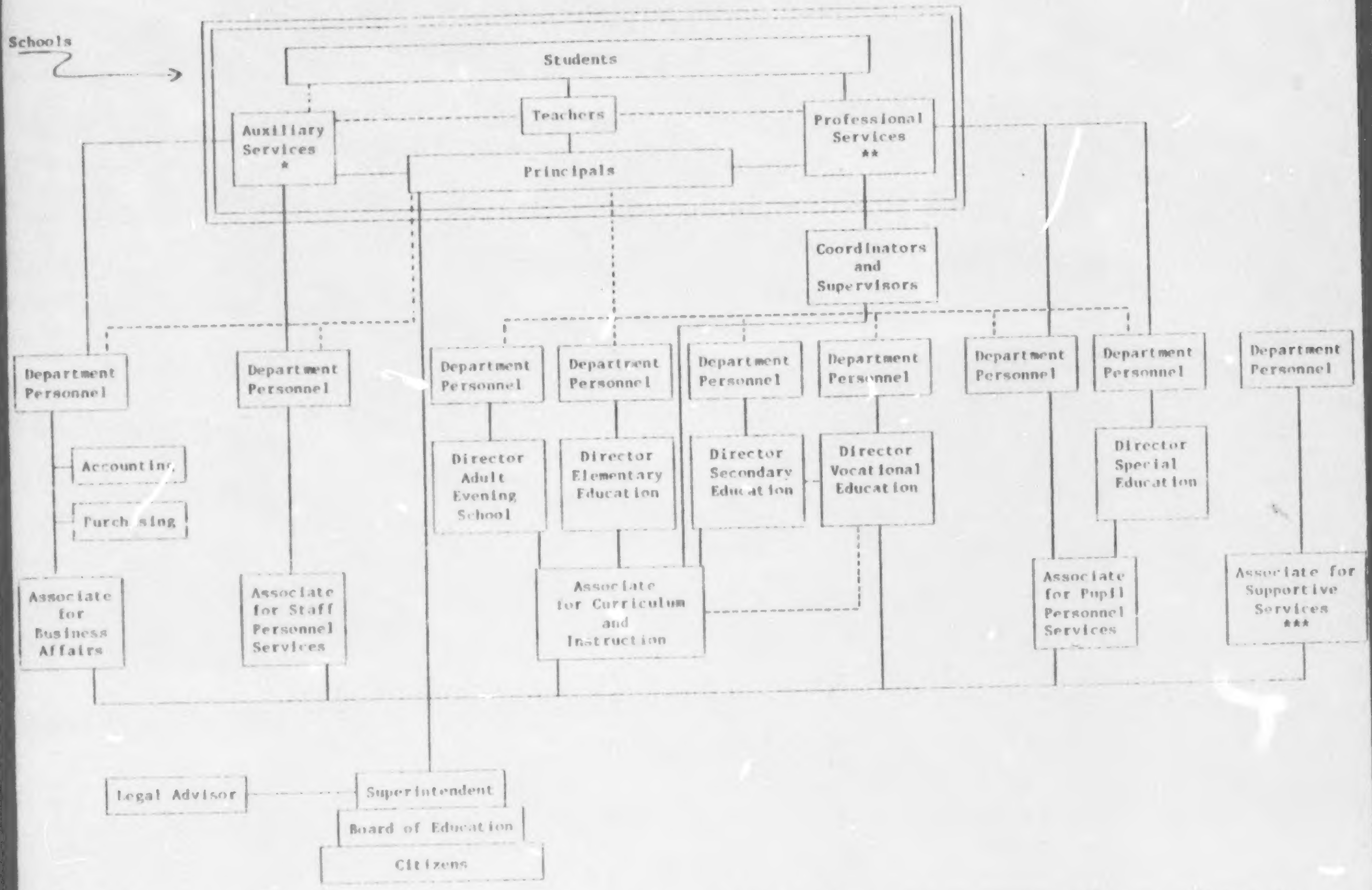
The city in which this project was carried out is located near a large midwest metropolitan area. This city represents an amalgamation of many nationalities, cultures and backgrounds and has a population of over 65,000, of whom 25 percent are from minority backgrounds. The city has also been experiencing a steady and constant growth pattern, showing increases in all groups, including an influx of Spanish speaking Americans and immigrants. The median level of education in the community is 12.2 years. The median income is just over $11,400 with housing costs ranging between $18,000 and $125,000. There are also over 100 industrial firms in the community, employing approximately 18,000 people.

The School District

The city has 22 public schools, all of which are administered under a unit district concept with one superintendent and one board of education. Of the 22 schools, 17 are (K-6) elementary schools, three are (7-8) junior high schools, and two are (9-12) senior high schools. Figure 2.1 is an organizational chart of the district, illustrating its hierarchical arrangement.

The Student Body

The district had a total student enrollment of 14,337 for the 1975-76 academic year. Of this number, 7,592 students were in grades K-6, of whom 2,862 or 37.7 percent represented minority backgrounds; 2,322 students were enrolled in the (7-8) junior high schools, of whom 857 or 36.9 percent were


Schools
Students
Teachers
Auxiliary Services *
Professional Services **
Principals
Coordinators and Supervisors
Department Personnel
Department Personnel
Department Personnel
Department Personnel
Department Personnel
Department Personnel
Department Personnel
Department Personnel
Department Personnel
Accounting
Purchasing
Director Adult Evening School
Director Elementary Education
Director Secondary Education
Director Vocational Education
Director Special Education
Associate for Business Affairs
Associate for Staff Personnel Services
Associate for Curriculum and Instruction
Associate for Pupil Personnel Services
Associate for Supportive Services ***
Legal Advisor
Superintendent
Board of Education
Citizens

---

[*] Auxiliary services include custodial, maintenance, transportation, and food services all under the department of business affairs; and personnel services include student teachers, substitutes, teacher aides, secretaries, monitors, proctors, para-professionals, etc..

[**] Professional services from the department of curriculum and instruction include music, physical education, gifted student program, art, Title I reading, library, media, and resources; and from the department of pupil personnel include speech therapists, nurses, social workers, psychologists, counselors, learning disability teachers, behavioral disability teachers, bilingual instructors, special education reading instructors, etc..

[***] The associate superintendent for supportive services was responsible for coordinating the various state and federal government programs and as such had duties cutting across all departments.

Figure 2.1. Organization chart of host school district.

from minority backgrounds. At the (9-12) senior high school level, 1,240 or 28 percent of the total of 4,423 students enrolled represented minority backgrounds. For the district overall, 65.4 percent of all students enrolled were white and 34.6 percent were minority, including a sizable group of Spanish-speaking students.

The Faculty and Staff

The district employed a professional staff of 902 during the 1975-76 school year. Seven hundred and eight of these staff were classroom, itinerant and special education teachers; 107 served in administrative and supervisory capacities; and 87 filled such roles as counselors, librarians, nurses, social workers and psychologists. Thirteen percent of the total staff had minority backgrounds and 59.8 percent of the staff were female. Of the classroom teachers, 13.6 percent were minority and 51 percent were female. Forty-eight percent of all faculty (K-12) in the district had earned M.A. degrees or over. Also, 86 percent of the teaching faculty were affiliated with one or the other of two teachers' organizations in the district. Fifty-seven percent were members of the American Federation of Teachers local, which was the official collective bargaining organization.

Curricular Programs

The curricular programs offered at the elementary, junior high school and senior high school levels are all fairly traditional. The district has substantial special education programs and the senior high schools offer comprehensive programs in college preparatory as well as vocational education and work study. The district also offers a complete co-curricular activities program including such areas as special clubs, ROTC, speech, drama, debate and athletics. Twenty-eight and one half percent of the seniors in the class of 1975 went on to attend four year colleges and universities. An additional 25.4 percent attended junior college. Most of the remainder either went directly into a job, joined the military service, or attended a special school.

Selection of the District

A key question now becomes why was this particular district chosen for the intervention? The prime criteria for selecting a district were as follows:

1. A unit district was chosen (i.e., including all elementary and secondary schools with one superintendent and one board) because it was felt that it was representative of most school districts, nationwide.
2. We wanted a district where the teachers had collective bargaining representation as, again, this was typical in large systems.
3. We wanted a district that was not overly affluent so that financial constraints would provide continuous pressure on the district. It was felt that this pressure would provide an opportunity to see how the intervention worked under such commonly ecountered constraints on school systems.
4. We wanted a district that was fairly heterogeneous in the makeup of its students.
5. We wanted to select a district in a community that was not overly liberal or innovative in adopting changes. We felt that a somewhat conservative district would provide a better test as to whether this intervention would work or could even be attempted by other than very innovative or experimentally-oriented schools.

In summary, we wanted to select a district that would be representative of larger urban school systems and would present the intervention with the challenge of that type of setting. We felt that if the intervention could work in this kind of setting it would be getting an adequate test. The district in this study was the first one we contacted. Below we will discuss more completely the entry process into the district.

Two other districts were approached to participate in the study and both refused for similar reasons. First, they felt that the intervention would give more power to the teachers by getting them involved in the problem-definition and problem-solving process. Principals were particularly concerned about this and felt that their own power and influence might be reduced as a result. We tried to point out that by getting teachers more involved in the problem-definition and problem-solving process, the teachers would become more committed to the system and thus would work more cooperatively with the principal. The principals still felt a threat to their autonomy and control in their schools. One of these two districts had just gone through a period of intense union-management conflict. The other district had no negotiated agreement with teachers, who, in general, seemed content with the present state of affairs. Both districts were reluctant to disturb the delicate balances present at the time of our requests, especially with a program which appeared to mobilize teacher power.

The other major source of rejection to the intervention from districts we approached was the belief on the part of the superintendents that the intervention required too much of the district's time. The request for released time for program leaders and program monitors (teachers) as well as for prinicpals to go through two to three days of training on implementing the intervention's components, as well as the request for additional school time for Program Group meetings, was seen as excessive. These districts already had their released time days worked out for curriculum review and development and thus felt that they did not have the time to devote to this particular intervention.

The Entry Process in the Experimental District

The First Year Entry

The initial contact with the host district concerning this intervention was made in March 1974, by the interventionists with the help of Dean B. J. Chandler, School of Education, Northwestern University. Dean Chandler wrote the Superintendent and indicated that this project was looking for a site, and because of its demographics this district was selected to be invited to participate in the intervention. The Superintendent indicated interest, and thus two of the project team went to the district to present the background on the intervention.

It was somewhat ironic in that the Superintendent was approached at a time when he was considering seeking the help of a consultant to correct a rather unwieldly committee system and improve the communication and decision making in the district. The Superintendent was hopeful the proposed project would help him deal with these problems. We were optimistic and assumed it would be a smooth entry.

What next followed was a drawn-out series of presentations to various groups in the district. A short document describing the program (see Appendix A) was circulated to each of these groups. During this stage of the entry it became more and more unclear as to which group or groups had the authority, responsibility or perhaps, more likely, the desire and commitment to make a decision whether to implement the program or not.

During this initial stage there was considerable opposition, or at least skepticism, from some members of the various groups concerning the worth or "workability" of the program. The higher levels (i.e., administrative groups such as the assistant superintendents and principal groups) appeared to be threatened by the idea of peer-group problem solving and decision making. Various individuals voiced fear that the "troublemakers" would take over the program and use it to make things even harder for the administration. They said they had made "enough concessions" to the union. As a result of union negotiations, several district committees had been established with teacher representation, and the district administrators perceived many of the teacher representatives to these committees as adversaries. In addition, they felt that the group structures would further complicate a very complex committee structure and they felt as if our program was duplicating their system of "faculty advisory committees" which they had established in each school. Finally, they were skeptical that teachers would exert effort to solve school problems. Their image of teachers, which was related to adversary union-management relations, was that they were interested in putting as little time as possible into their teaching activities and would refuse to meet for problem-solving meetings.

Despite the reservations voiced in these meetings, the Superintendent informed us that the "cabinet" (assistant and associate superintendents) and the principal group had voted to go ahead with the program. What we believed to be the last of the series of entry meetings was held in June 1974 with a "representative" group including teachers, subject matter coordinators, and assistant principals, none of whom had been included in presentations up to that point. This group was being set up as a liaison group to help get the program implemented when the time came. The Superintendent also attended this meeting. It soon became evident to us that the road ahead would not be that smooth in the district. The district personnel in attendance indicated quite clearly that while they were not opposed to the concepts of the proposed program, and in fact saw some benefit in it, they felt it did not fit in very well with the way the district was run. During the meeting, personnel spent a great deal of time pointing out to the Superintendent that from their perspective, at least, he had not appeared very supportive of "committee" efforts or efforts of teacher decision making and that the lower levels of the organization had almost no influence in the district. The subject quickly shifted to the show of commitment that teachers would need if they were willing to exert effort towards the program. Included in the conversation were such issues as whether the teachers would receive released time from teaching in order to meet in problem-solving groups and whether the district office would assure teachers that they would respond to the efforts and requests from the Program Groups. The teachers did not want to embark on any efforts that were low priority in the eyes of the administrators.

At this meeting, a point was strongly made that had been brought out in earlier meetings: the district had started many programs in the past and hired many outside groups, and yet nothing ever seemed to come of any of the programs because the district office did not appear to attach any importance to them. This was an issue that we were to hear about many times during the next two years.

Thus, school ended in June 1974 with the administrative component of the district having decided, under some pressure from the Superintendent, to adopt the program. However, it was clear that there still was much to be done to gain acceptance of the program by teachers and principals.

Entry the Second Year

In early September of the second year, the intervention team met again with a new liaison group with the objective of deciding how to implement the program in the district. However, one rather significant event was in the process of unfolding. We had been informed over the Summer that the Superintendent would be leaving the district at the end of that academic year. After the meeting, we were informed that his departure was moved up to December and an interim superintendent would be appointed to serve until a new superintendent could be found. The steering committee had already "sensed" the imminent departure of the Superintendent. Consequently, what was to have been a meeting to plan implementation became, because of both superintendent change and new members on the committee, yet another forum for explaining the program--to "sell" the program.

Fortunately, the circumstances of this sessions were such (e.g., sufficient time separation from organization demands) that for perhaps the first time we were able to completely present the program and respond to individual concerns. By the end of the meeting, the steering committee was sufficiently in favor of the project to want to go ahead with its implementation. The future interim superintendent agreed to cooperate but without enthusiasm. After another round of meetings, it was agreed that the decision whether to participate would be made on a school by school basis. However, there was never any formal endorsement of the program to give teachers a feeling of district commitment.

The next step was for members of the project team to meet with representatives from the faculty of each school to explain the project. Copies of a short description of the OD program (Appendix B) were sent to each of the 22 schools in the district. The teachers were to have read this before they met with members of the project team to discuss the project. The project team was invited to visit 15 of the schools and make presentations. After the presentations, the teachers and principal of each school were to jointly decide whether or not they would participate in the study.

During these presentations, members of the faculties voiced the same hesitations heard earlier concerning the need for commitment from the central office and the fear that this would turn out like all the rest "as a waste of time." In some cases they voiced the belief that their school was functioning well and that any problems they had were at the district level, but that the district office was just not open to requests or suggestions from below. Another attitude which was detected was,"What's in it for you, the interventionists?" Teachers seemed skeptical of our intentions and felt we were using them as "guinea pigs" to get a couple of publications and doctoral dissertations. Since there was a partial truth in this accusation, we could not deny it. We felt it most proper to take the impact out of this argument by focusing on the fact that in exchange the district was getting some very real services; they were going to be trained in problem solving, how to deal with change, etc.. Nevertheless, this argument had little impact until those services were actually performed. Finally, teachers were justifiably skeptical of embarking on a new program with no indication of whether the future superintendent would be supportive of or responsive to their efforts.

Some schools, however, were genuinely interested. In all, eight elementary schools and one high school decided to adopt the program. It was clear at this point that district-wide impact from this intervention could be limited, given the partial participation and the temporary superintendent. Consequently, one of the research focuses became a comparison of the participating and non-participating schools, since it was possible to collect data from all schools. Thus, in December of 1974, three months later than anticipated, the project was ready to begin in the district.

Summary

This particular district was chosen for its demographics. It was fairly heterogeneous in terms of minority group composition; it was fairly large;

it was a unit system; and it was not particularly affluent nor characterized by innovativeness or experimentation in the past. In other words, it was felt that this district would provide a difficult test of the OD program. If it could have an impact on this system, it could probably be effective in most situations.

Given the difficulty of the entry, the logical question became, "Why stay in this district?" A major reason this district was not abandoned is that there already was significant investment in time and money in the district. This type of reason takes on some legitimacy in the research context, where time and money are fixed and resources are limited. Also, the project team felt a commitment to those in the district supportive of the project to see it through and thus would not leave the district unless the district itself made that choice. Finally, these problems are not atypical; and, in fact, the confronting of these problems could eventually add to the validity of our findings.

Despite the problems of the district encountered in the entry process, there did seem to be some fit between the OD project and the district's needs. Union-management relations were threatening to administrators but nevertheless established and were seen in some time-softened perspective. The district had some years earlier been created by merging the local elementary and high school districts. Many elementary principals had had experience in their earlier district with a peer-level principal decision-making group. The network of proliferating committees which permeated the district had established a precedent for and expectation of teacher participation. The poor functioning of these groups, rather than invalidating the basic idea, had created a stronger desire, in some people, to find something effective.

CHAPTER THREE

THE RESEARCH DESIGN AND HYPOTHESES

The previous chapters have described the rationale and design of the OD program and the process of obtaining and entering a school district willing to serve as an experimental site in order to evaluate the program. It is clear that there are really two design issues regarding this program. The first pertains to the substance of the program itself. The second pertains to the activities and methodologies to be used in evaluating its impact and usefulness. This chapter focuses on the latter design issue. In this chapter the framework for evaluating the OD program is described. Two basic approaches are delineated. The first is the use of a quasi-experimental design methodology (Campbell & Stanley, 1966) which focuses on the comparison of the initial and final states of the participating schools with the initial and final states of the non-participating schools in the host district. It can be called summative evaluation. The second approach focuses on the process by which the initial states of the participating schools develop or evolve into their final states as a result of their participation in the OD program. It can be called formative evaluation.

On the basis of the design of the OD program as described in Chapter One and the evaluation research design developed here, we make a series of hypotheses which are also presented in this chapter. The hypotheses, like the evaluation framework, are roughly divided into two types: summative and formative.

Finally, the methodology used for data gathering is presented, including the operationalizations of the various conceptual variables. Statistics pertaining to the reliability of the various questionnaire scales are also presented.

This chapter presents only the research design, hypotheses and methodology. Reporting and discussion of the results obtained through the use of this framework are presented in subsequent chapters, in roughly the order followed in the present chapter.

The Quasi-experimental Design for Summative Evaluation

As reported in Chapter Two, the individual schools of the host district either self-selected into the program or opted not to participate. This state of affairs was a mixed blessing. The participation of slightly less than half of the schools in the district severely jeopardized the status of the intervention as a district-wide program. At the same time, the non-participating schools essentially provided us with a non-equivalent sample of schools to provide some control in gauging the impacts of the intervention on the participating schools.

The presence of the control schools within the district became especially important with the failure to get other school districts to participate, either fully or as controls. From this point on, because of the truncation of our district-wide intervention design, we are forced to shift our unit of analysis from the district level to the individual school level. In general, when we speak of the "organization" we refer to the individual school. From this perspective, we often consider the district-level policies and personnel to be part of the school's environment. We therefore consider the OD program to be applied at the school level. The organizations being developed are the individual participating schools.

The Pilot Study

A previous research study had implemented a less extensive version of the same basic OD program in a random sample of schools from a universe of five school districts (Coughlan et al., 1972; Coughlan & Cooke, 1974). Three control groups of schools had also been randomly selected from the same universe. The control groups included: (1) one with pre-test, survey feedback only (i.e., survey feedback without problem solving and collective decision making), and post-test; (2) a second with pre-test and post-test; and (3) a third with post-test only. The experimental group consisted of pre-test, survey feedback with the structural problem-solving program, and post-test. This design was a strong one and removed most of the threats to validity enumerated by Campbell and Stanley (1966). In addition, the use of this design to evaluate the OD program revealed that the intervention had a significant summative impact.

Nevertheless, the previous study left unanswered questions and gaps in our knowledge of how the intervention caused the measured changes in those schools. First and foremost, the resource constraints facing the previous research made it virtually impossible to gather much, if any, information about the processes which occurred to produce the measured effects. Secondly, each participating district had, at most, two schools which implemented the full intervention. There was some question about the extent to which the special status of these schools in the district may have helped result in the positive results. Thirdly, a major indicator of change was the same questionnaire which was used to generate the data feedback to the schools. Thus, the data from the time-one administration of the School Survey questionnaire was, in effect, contaminating the sample and biasing the results. Furthermore, since most of the data was collected via self-report questionnaires, it was subjective in nature. Few data gathered by other means were available to corroborate with or "triangulate" on the questionnaire responses. Finally, since the experimental schools were scattered over five districts, there was considerable variation in their environmental and administrative contexts. Had there been process evaluation, the presence of these external variations would have made it difficult to separate the dynamics within the school which led to the measured outcomes from those stemming from without.

The research design used in the present study was used in order to complement the information gained in the pilot study. Trade-offs have been made in order to do this. Most importantly, generalizability to other samples of schools has been sacrificed by the non-random selection of schools within one district. The major gain has been in the richness of the data available to us and the opportunity to sort out the dynamics affecting the success or failure of the OD program. The following section describes in detail the research design used.

The Present Study

The research design is a variation on the following basic experimental design:

Groups	Pre-test	Intervention	Post-test
G_a	O_1	X	O_2
G_b	O_1		O_2

The particular situation, however, demands a more explicit notation which reflects the alterations necessarily made to the basic design. Table 3.1 presents the modified design.

Pre-test and post-test. Essentially two questionnaires were used here.

Table 3.1

Overview of Research Design and Timetable

School Group	First Year				Second Year		
	Pre-test	Intervention				Post-test	Continuation
	Evaluation Questionnaire and School Survey	Training	Experimental Components	Interim Interview	Training	Evaluation Questionnaire with School Survey	Feedback
	February 1975	February 1975	February-March 1975	June 1975	October 1975	February 1976	March-April 1976
Participating	S_1 O_1	T_1	$FB(S_1)$ - PS_1	I	T_2	$(SO)_2$	$FB(SO)_{12}$
Non-participating	S_1 O_1		$FB(S_1)$ only			$(SO)_2$	$FB(SO)_{12}$

S_1 = School Feedback Survey time one

O_1 = Evaluation Questionnaire time one

S_1 and O_1 = School Survey time one and evaluation questionnaire time one were administered separately

$FB(S_1)$ = Feedback of survey results (S_1)

$FB(SO)_{12}$ = Feedback of all questionnaire data collected comparing time-one and time-two results, essentially data "handback"

PS_1 = Refers to three two-hour released-time sessions for the groups as part of the start-up; all subsequent group sessions are considered to be effects of the intervention

SO_2 = Combined School Feedback Survey and Evaluation Questionnaire time one

T = Training

I = Interview

To overcome the problems of bias in evaluating the program using the same questionnaire results which are fed back to the experimental schools, the second questionnaire was added. Originally called the School System Description Questionnaire (SSDQ) by us, we often refer to it in this report as the "evaluation" questionnaire. The results from the SSDQ were not made available to the district until the termination of the project. Instead of being classified as post-test and pre-test, the School Surveys could also be considered as part of the intervention. The two questionnaires were administered at separate times during the pre-test stage. For the post-test, shortened versions of the two were combined into one instrument requiring a single administration. The contents of the post-test questionnaire were the more highly reliable measures used on the pre-test. It is only on these repeated measures that the effects of the intervention can be measured.

Training. There were two training periods. The first took place roughly at the time of the pre-test questionnaire administration. The second was held at the beginning of the second academic year and was aimed at complete training of new replacement personnel and refresher training of continuing personnel.

Feedback. The first year feedback was handled in two ways. In each of the participating schools the trained personnel from that school fed back the data in the first formal meeting of the school group. In almost all of the non-participating schools, an after-school feedback session for the faculty was conducted by a member of the research team. In the remaining schools, the data were handed back to the principal.

The second year, feedback was in all cases in the form of "data handback."

In the participating schools, no formal feedback sessions were held as a part of the research design. Participating schools which did feed the data back according to the OD design did so on their own time and at their own initiative.

Problem-solving process and structure. This part of the intervention was communicated at training, where the necessary skill transfer also took place. The research design provided for active implementation of these intervention components as well as the feedback by setting aside three two-hour problem-solving sessions for the school groups in February and March of the first year. Time for these initial sessions was partially set aside by the district through the use of early school dismissal and partially donated by the participating faculty members. No other formal released time was set aside by the research design. Any additional problem-solving meetings and uses of the structural components of the OD program were at the initiative of the school personnel.

Groups. Ideally, the membership of the experimental and control groups should be randomly determined. As we have seen, this was not the case in this program. The participating schools self-selected. Thus the design is a non-equivalent control group design and, as such, any results of the design will be open to alternative interpretations which would explain any differential changes in participating schools by the bias in the original sample of experimental schools. The threats to validity created by this design deficiency are of lesser magnitude than would be usual because of the randomly determined groups in the relatively tight design utilized in the pilot study. The hypothesis-confirming results of that study allow us to be less concerned about this threat to validity here.

Nevertheless, the presence of the non-equivalent control group is much better than having no control group at all. The fact that both groups are drawn from the same district means that, by and large, the same external forces are operating in all schools. Any changes in the states of the schools which are caused by changes in their environments--such as superintendent turnover, school board actions, legal decisions, etc.--will most likely apply across the board and therefore can potentially be separated out statistically. These external effects could not be distinguished from experimental effects in the participating schools were it not for the trend comparisons made possible by the availability of the "controls."

Data analysis. The presence of a non-equivalent control sample in a longitudinal field experiment creates two confounding tendencies which must be taken into account in statistical data analysis. First, there are liable to be natural or externally caused changes taking place in all schools over the time frame of the analysis. Second, it is likely that the participating and non-participating schools are, due to the selection procedure, systematically different in their organizational states. Given these two *a priori* sources of variation, they must be statistically accounted for and removed so that the only remaining patterns are those which change over time *and* which show different patterns of change for the participating and non-participating schools. A two-way analysis of variance (two-way ANOVA) does just this when the independent, qualitative variables are time (levels equal pre-test and post-test) and participation status (levels equal participating and non-participating). The dependent variables are the various measures of organizational states which are explained later in this chapter. This 2 x 2 design will identify effects ostensibly due to the presence of the OD program as statistical interactions between time and participation status. An extended discussion of this type of analysis for this type of situation is made by Nunnally (1976). In his treatment of this issue, Nunnally presents the case for the above type of analysis as the most legitimate treatment of the non-equivalent control group design.

At the same time, we recognize the potential constraints that a pure quasi-experimental design will create on the potential knowledge to be gained from program evaluation (Glaser & Strauss, 1967; Ross & Cronbach, 1976). Some of this additional knowledge will be gained by formative evaluation approaches to be described shortly. However, the summative statistical analysis of the data can also be used to gain useful insights. One technique which we have utilized is the presentation of Student t's for the pre- and post-test measures for both the participating and non-participating samples. Although not a rigorous test of program effects, it allows the reader to get a feel for the pattern of changes which occurred.

Another procedure we make use of in the subsequent results is the artificial juggling of our "control" groups. In effect, this editing of group memberships is an attempt to make the experimental and control groups less "non-equivalent." The matching criterion we most commonly will use is type of school. Both control and experimental groups consisted of secondary and elementary schools, but the relative size and complexity of the high schools meant that in a very real sense the intervention in the high school was different in kind from those in the elementary schools. Thus, most of our analyses are done with groups comprised of elementary schools only.

Design for Formative Evaluation

Formative evaluation involves the measurement of and the making of judgements about the quality of the processes used to intervene in the organization and to implement the program design. Formative evaluation is a dynamic process which focuses on a dynamic process.

Unlike summative evaluation design, which has its roots in the experimental design literature, formative evaluation design does not have a well-formulated basis. There are a few design issues which seem to predominate, however. These issues arise due to the kind of information which is of interest in formative evaluation. The central focus of formative evaluation is the developmental or transformational process which occurs to provide the tangible linkage between beginning and resulting states of affairs. Of course, part of this issue includes describing those beginninng and subsequent results in such a way that their connection through the process is evident. In the OD program, formative evaluation therefore means chronicling the occurrences and dynamics which describe the way each of the participating school faculties, because of some initial state of affairs, implemented and utilized the OD program which we were presenting to them as some idealized, normative model. It also requires description of the tangible results directly associated with the program. In this case, the most tangible results are probably the particular problem solutions implemented by the participating school faculties using the means provided by the normative design.

Collecting the kind of information mentioned above requires, above all, a continuous--or nearly so--monitoring of the history and development of the OD program in the participating organizations. This necessity in turn seems to demand a labor intensive design and an extensive amount of data. Furthermore, the constant monitoring of processes naturally raises the possibility that the process itself will begin to react to the constant presence of the data monitors. To minimize the possibility that data gathering thus contaminates the results, unobtrusive monitoring methods are preferable.

Before describing the situations in which we were able to "unobtrusively" gather continuous data about the formative processes by which the intervention occurred and was implemented, we believe it is necessary to present a general model for conceptualizing the formative processes. Specifically, there are two formative processes which must be kept separate in our analysis: the process of intervening and the process of program implementation. The first refers to the set of activities by which our research team intervened or made contact with the host organization(s). The second refers to the set of activities by which the program design we communicated in our intervention was implemented in the host organization(s) by school district personnel. We discuss the second first.

Formative Evaluation of the Implementation Process

We use a systems framework as a useful approach for conceptualizing the processes we are evaluating. For the moment, consider the host organization as a "black box." (The term "host organization" has multiple referents. The following model is equally applicable whether we consider the host organization to refer to the entire school district or an individual school within the district. The analyses in this report variously assume both. The context should make the referent clear.) Were we to delve into the black box, we would discover an entire system of processes and structures which go together to form the organization. The OD program is really a design for a particular subsystem to be superimposed on or implemented in the existing system of organization. Once implemented, the host organization will be characterized as a new and different system.

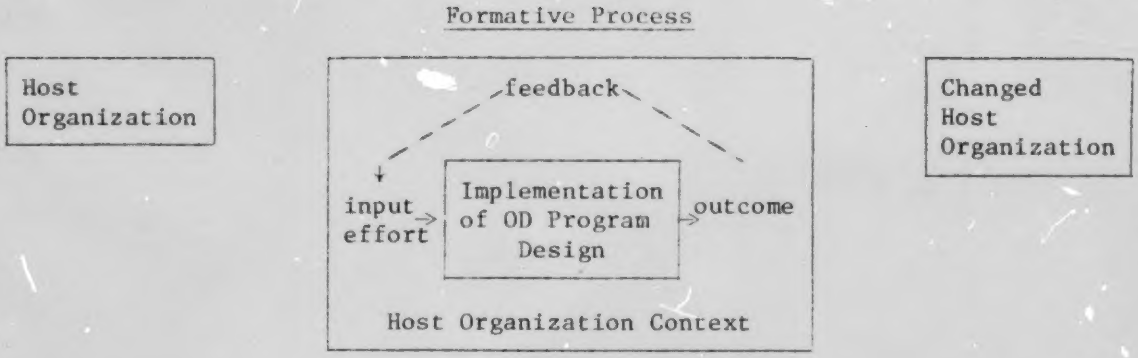

Formative Process
Host Organization
feedback
input effort
Implementation of OD Program Design
outcome
Host Organization Context
Changed Host Organization

Figure 3.1. The implementation process.

During the formative stage, the implementation of the OD program can be characterized as a simple system. Inputs occur in the form of efforts, resources, and knowledge contributed by the host organization and its personnel. The ongoing host organization provides a context in which the OD program is being implemented. The degree to which this organization context is compatible with the design of the OD program is important. Together, this degree of "fit" between the program and its context and the degree of effort input into the implementation will help determine the degree to which the ideal design of the normative OD program is actually achieved. All three of these issues, the effort, the design-context "fit," and the degree of implementation, will determine the outcomes which will occur. These various outcomes will, in turn, result in some reaction from the host organization which is fed back into the process and either causes adjustment in the program of implementation or reinforces the existing process. The feedback process is the mechanism by which the context-design fit is adjusted. Formative evaluation involves collecting information about these aspects of the implementation model--input, design-context fit, process, and outcome--and making judgements about that information.

Formative Evaluation of the Intervention Process

The effort and inputs which go into beginning the implementation process do not occur spontaneously. Their source is the set of activities known as the intervention which is engaged in or initiatied by the intervention team. This intervention process is the other focus of formative evaluation. It also can be conceived of in terms of a simple system. In this case, the process does not occur within a single context but provides the linkage between two entitites: the host organization and the intervention team.

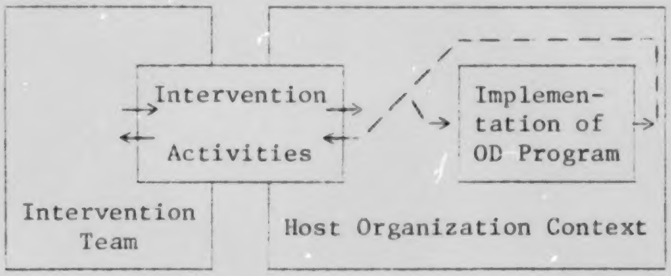


Figure 3.2. The intervention process.

Formative evaluation of the intervention process can be approached in the same way as that of the implementation process. That is: we need to consider the inputs and efforts going into the intervention activities from both contexts, the host organization and the intervention team; we need to consider the degree to which the intervention activities (simultaneously) "fit" or are compatible with the dual contexts in which they occur; we need to assess the quality of the intervention activities; we need to assess the outcomes of those activities; and we need to assess the degree to which feedback about the intervention process resulted in adjustments in that process.

Rationale for Formative Evaluation Design

The set of intervention activities constitutes a two-way input-output process. Inputs in the form of information and energy are coming from both the host organization and the intervention team. As the above diagram makes clear, the only source of information about the OD program design is the intervention team and that information is communicated through the intervention activities. Similarly, the sole source of information about the program implementation is the host organization and this information is available to the intervention team only through the intervention activities.

When we talk of intervention activities, we use the broadest possible definition: i.e., all activities and situations in which we, the interventionists, or instruments constructed by us are confronted and reacted to by personnel in the host organization. When we take such a broad definition of what constitutes the intervention activities, it becomes apparent that our intervention into the ongoing organization systems of the district and the individual schools began with our first contact with the school district and continued on through the entry process, the training, the data collection, and the interviewing of school personnel. All of these activities, in varying degrees, communicated information to district personnel about the rationale for and design of the OD program. At the same time, all of these activities, also to varying degrees, were our sources of information about the district, the participating and non-participating schools, and the process of program implementation which occurred; as well as our sources of feedback about the quality of our own intervention activities. In this latter sense, our intervention activities simultaneously constituted our design for collecting information to be used for formative evaluation. Therefore, the design we used for formative evaluation is identical with a chronological listing of our intervention activites. This "design" for formative evaluation is presented in

Table 3.2. This table also presents the organizational units about which information was gathered during each activity and whether that information was "direct" or "indirect." Direct information about an organization unit is that which is conveyed by the behaviors or statements of personnel representing that unit. Indirect information about an organization unit is conveyed by statements or responses of personnel not representing that unit--such as district level personnel sharing their perceptions of a particular school. The nature of each intervention activity constrained the information which could be gathered since it involved only personnel from certain organizational units in the district.

Table 3.2 is incomplete in that it explicitly represents the aspects of the host district about which each intervention activity yielded data, and therefore only shows the data sources for formative evaluation of the implementation process. Nevertheless, it should be understood that each intervention activity also yielded data about itself. During each activity, we received considerable feedback from district personnel about that activity. In addition, we were careful to function as participant observers in such activities. During most intervention activities, a sizable portion of the research team was always present. Intervention activities were always followed by debriefing sessions in which the research team compared notes and tested the reality of their observations. Most of the training sessions, especially the first year, were tape recorded in their entirety. Interviews always included retrospective questions about the quality of previous intervention activities. Thus, while Table 3.2 does not explicitly show it, the formative evaluation design presented there was also applied to evaluation of the formative process of the intervention activities themselves.

Table 3.2

Intervention Activities Yielding Formative Evaluation Data

	Data about . . . (D = direct; I = indirect)		
Activity	Participating Schools	Non-participating Schools	District Office
Year One:			
Negotiating process (Winter-Spring, 1974)	I	I	D
Entry process (Spring-Fall, 1974)	D	D	D,I
Training process (Fall-Winter, 1974-75)	D	D	D,I
Questionnaire administration (Fall-Winter, 1975)	D	D	I
Feedback (Winter, 1975)	D	D	D
Program process support (Winter-Spring, 1975)	D		D,I
Interim interview (Summer, 1975)	D		D,I
Year Two:			
Start-up (Fall, 1975)	D		D
Training process (Fall, 1975)	D		
Program process support (Fall, Winter, Spring, 1975-76)	D		D
Questionnaire administration (Winter, 1976)	D	D	I
Feedback (Spring, 1976)	D		D
Training process (Summer, 1976)	D		
Final interviews (Summer, 1976)	D,I	I	D

Since we were simultaneously intervening in the host organization and conducting research on the effects of that intervention, we were extremely conscious of the possible contamination of the intervention which could result if we were to engage in extensive research-oriented activities. The literature strongly suggests that obtrusive modes of data collection in and of themselves can constitute an intervention in the very system being measured. Our design, therefore, attempted to minimize the reactions which the host organization might have to our data collection activities by making many of these activities as unobtrusive as possible. Our strategy for doing this was to limit data collection to those activities already identified or identifiable as intervention activities, i.e., activities which were legitimately undertaken for the purpose of influencing the system to implement the OD program design and only secondarily or coincidentally yielded data useful for formative evaluation.

The list of intervention activities in Table 3.2 can be divided into six types of activities which occurred in each of the two academic years: initiating activities, training activities, questionnaire administrations, feedback activities, supportive activities and documents during program process, and interview activities. The manner in which each of these activities was used for data collection on the formative processes is discussed below.

Initiating activities. During year one these activities consisted of the negotiation and entry processes. During these activities, we gained a large amount of information about the characteristics and general organizational state of the district, as well as considerable knowledge about the behavioral styles of key district level personnel. Much of this information has already been recounted in Chapter Two. Data collection was unsystematic and somewhat organic during the negotiation process. However, the presentation of the program design and rationale to all schools and various groups of district level personnel created a situation in which we could begin to systematically compare the responses to our proposal across schools and across levels of hierarchy.

In the second year, start-up activities did not yield data quite so rich; nevertheless, they were still useful. There were basically two start-up activities the second year. One was an interim progress report to district level personnel and principals concerning the program activities in the participating schools during the first year. Responses of district personnel and principals were duly noted. Problems pointed out were incorporated into procedural changes. The second activity was an announcement by us that training for replacement leaders and monitors was to be held. Responses of the schools were revealing of their various degrees of program implementation, design-context fit, and effort input.

Training activities. The first year, the various training activities included almost all principals and district office personnel as well as the elected teachers from the participating schools. Invariably, the process of describing the rationale and design of the OD program, as well as the behavioral expectations we held, resulted in considerable feedback from the personnel participating in the training. Since the program was presented in a rather standard manner in all training sessions, the situation made salient the differential responses to the program seemingly due to the organizational position of the trainees (district level administrator, principal, teacher) and/or to the schools they represented.

The skill building exercises used in the training sessions also yielded considerable data about the behavioral capabilities and tendencies of the trainees, including cognitive and interpersonal approaches.

Responses by trainees during their training experiences often resulted in our altering their subsequent training in that very session as well as changes in the implementation design itself. Intervention components (such as district office training) were sometimes created as a result of information gained during training experiences.

Two training sessions were held the second academic year. Both were held to train replacements of monitors and leaders. In both cases, the information we gleaned from training was limited to participating schools. Besides the kinds of information already mentioned, these two sessions gave us additional insight into the progress and process of the program as it had occurred in the schools.

Questionnaire administration. Normally, the administration of questionnaires is about as obtrusive a data-collection method as exists. The degree to which this obtrusiveness contaminates the results of the OD program is minimized by the fact that survey data collection is a necessary activity prior to data feedback.

The data resulting from questionnaire administration are basically used for summative evaluation; however, they are also useful for characterizing the organizational contexts in which the programs were implemented. Feedback received during the activities of administration the first year resulted in extensive alteration of our instruments for the second year and in alteration of the administration procedures.

Feedback activities. The first year, the results of the School Survey were fed back to most non-participating schools by a member of the intervention team. This opportunity to be physically present in those schools as well as to observe the responses of the various faculties to the data was one of our last opportunities to get observational data about these schools which could be used to interpret the questionnaire responses of the faculties. The second year, time and resource constraints prevented personally feeding back data to these non-participating schools.

Both years, data aggregated to the district level was fed back by the intervention team to district level personnel. Reactions to these data presentations yielded some useful information.

Support of program process. During both years, the intervention team provided supportive activities and documents during the periods when the program design was being implemented and utilized by the participating schools. These supports were sometimes pre-planned and sometimes in response to requests by school personnel.

The supporting documentation was part of the original design and was one of the main components of the monitor's role. Some documents bascially were designed to make the dimensions of group process and the stages of our normative problem-solving process continually salient to the program personnel. By filling out these documents, the monitor provided feedback to the leader about the group's process to be used in adjusting behaviors. Other documents were provided which were to be used to record proposed solutions and the rationale behind them. These forms also facilitated communication of solutions to and from the legitimation stage and specified plans for implementing and routinizing legitimated solutions. All documents were pre-printed on NCR (no carbon required) paper and program participants were asked to send us copies. This method, we hoped, would provide us with relatively continuous information about the progress of the program in each school without being overly obtrusive. Many schools created additional or replacement documents which were used for program purposes. These were sometimes also sent to us as they were produced; usually, however, we collected such documents during the interviews.

Supportive activities took many forms. Sometimes we performed minimal consultative services for individual superintendents, leaders, principals, and/or monitors who were experiencing particular problems. These were primarily handled by phone. This kind of activity became less frequent over the first year and approached extinction in the second as school personnel gained experience with the program. We also held "debriefing" sessions for groups of program personnel, i.e., leaders and monitors, principals. While these sessions were oriented completely toward assisting the program personnel and allowing them to provide assistance to one another, they were a source of considerable information to us.

Interviews. The interview was perhaps the most obtrusive data-gathering mechanism we used. It almost entirely functioned as a data-gathering activity with little rationale available for characterizing it as a necessary intervention activity for communicating or transferring the OD program design. Part of each interview did focus on acquiring feedback about the usefulness of other intervention activities, such as training, and on collecting suggestions for changes; but this focus probably accentuated the experimental nature of the intervention as much as it legitimated the interview as part of it.

In our view, the reactions to the first-year interviews were extremely functional in helping to attain continuity of the program between the first and second school years. Not only did responding to interview questions help remind program personnel about their roles and responsibilities for the beginning of the following school year, but also the content of the questions caused various aspects of the program to become salient in their minds. By pointing out analytic issues in the form of interview questions, we may well have given program personnel a better cognitive "handle" on their first year's experiences so that they could better make adjustments for the second year.

The first-year interviews focused on the experiences of the participating schools and their personnel. Questions were asked regarding the formative implementation process and the intervention activities. Data gathered in these interviews were very instrumental in our taking steps to adjust the formative processes in both intervention and implementation activities. All monitors, leaders and principals were interviewed in the participating schools. The interview schedules were structured and allowed comparison and triangulation of perspectives engendered by different school and program roles. Because of the obtrusiveness of the interview, none were contemplated for non-participating schools. Time and manpower limitations would have made this impossible anyway. District office personnel were not systematically interviewed. A fairly extensive, unstructured session with the interim Superintendent did yield considerable information.

The second year, interviews were also limited by the resources of the research team. Once again, formative data were collected from the participating schools. In addition, systematic interviews were conducted with district level personnel. These interviews yielded formative data regarding the intervention and program implementation but also provided considerable data of various types which allowed comparison of all the district's schools. Both perceptual and archival data were collected during these district interviews.

In addition to program and district level personnel, we had planned to interview a stratified sample of personnel in the participating schools and non-participating schools, but time, manpower, and monetary limitations made this impossible.

Hypotheses for Summative Evaluation

In this section, we state in a general way the hypotheses we have regarding the effects which our intervention activities were expected to have on the organizational aspects of the district. Basically, the hypotheses refer to the results of comparing the states of the host district and its separate school organizations as they were measured before the intervention with those states measured after the intervention. These hypotheses should be primarily interpreted in terms of the quasi-experimental design. In order to make substantive predictions regarding the quasi-experimentally determined summative outcomes of the intervention, we need to be concerned with both the nature of the intervention and the nature of the host organization. It is especially useful to have an image of the location of the intervention in the ongoing organization system. The following section provides this image. Subsequent sections state the hypotheses which are suggested by this particular image of the location of the intervention in the organization system.

Locating the Intervention in the Organization System

In an earlier chapter, we presented a systems model of an organization (see also Figure 3.3). The organization is conceived of as an entity which transforms, using some throughput process, inputs from the environment into outputs of various types. One type of input on which we wish to focus is influence exerted on the organization by entities in its relevant environment. The organization itself we conceptualize as consisting of many processes and a structure upon which the processes are related. The nature of our intervention makes most salient the processes which are related to decision making and problem solving and their associated structures. The outcomes of the organization's throughput can be of many types. We chose to focus on two types of outcomes: (1) the degree to which various organizational goals are achieved and (2) the degree to which the personal and task-oriented needs of individuals who staff the organization are integrated with organizational practices. Interim output resulting from decision-making and problem-solving processes and structures of the organization determines the emphasis and resources which are allocated among the various possible goals of the organization. We have conceptualized these to be outputs of the organization which are instrumental in nature and, as such, which are undertaken to achieve the various organizational goals and to help determine the degree to which the goals are achieved. This model is represented in Figure 3.3. Notice in this figure that there is feedback possible in the system.

Figure 3.3 also specifically places the location of the intervention in this model of the organization system. The specific linkage mechanism between the intervention and the ongoing organization system has already been capsulized in Figure 3.2 earlier in this chapter. The box designated as the organization throughput in Figure 3.3 and containing both structure and process is identical to the box labeled "host organization context" in Figure 3.2. As has been explained extensively in earlier chapters, the substance of the intervention is a design for a decision-making and problem-solving structure and process to be implemented in the ongoing organization.

Units of Analysis

As it stands in Figure 3.3, the model is general in nature, especially

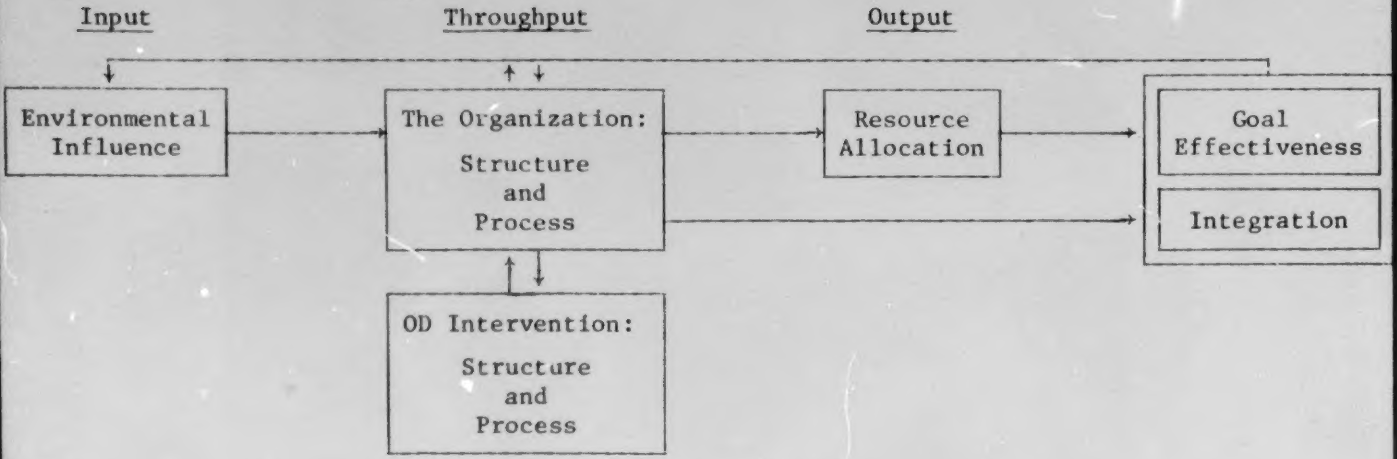

Input
Throughput
Output
Environmental Influence
The Organization: Structure and Process
Resource Allocation
Goal Effectiveness
Integration
OD Intervention: Structure and Process

Figure 3.3. Relationship of the OD program/intervention to the ongoing organizational system.

regarding the organization referent. The organization could be the district as a whole or an individual school within the district as well as some other designation. For reasons explained earlier, we primarily consider the organization unit of analysis to be the individual school. But, since many of our measures of the various phenomena in the model are at the individual level and are converted to organization variables by simple aggregative procedures, it is often more beneficial--indeed, it is often more valid--to view the individual as the unit of analysis.

If the individual is the unit of analysis, then: environmental influence can refer to perceptions the individual has of the influence which environmental entities have over the school or over the individual's own activities; structure and process can refer to the perceptions the individual has of them at the organization level or to the individual's position within them; the intervention can refer to the degree to which the individual is exposed and affected by its structure and process; goal effectiveness and resource allocation are individual perceptions of what are basically organization level phenomena; and, finally, integration still refers to the same individual level psychological outcomes (such as perceived role ambiguity and satisfaction).

Hypotheses Regarding Non-equivalency of Participating and Non-participating Schools

The quasi-experimental design makes the assumption that self-selection rather than random selection of our experimental and control groups will yield a pre-test bias due to systematic differences between the groups. By measuring the organization states of all schools before the implementation of the OD program, we can partially test the legitimacy of this assumption, in this case by comparing the states of participating schools with the states of non-participating schools. Furthermore, our OD program has particular characteristics and goals. These were made salient to the personnel of the district during the entry process. Therefore, we would expect that the implicit decision rule which different school faculties used to determine their participation status would somehow involve a comparison of their perceived organization characteristics with the type of characteristics with which the OD program proposed to deal. The hypotheses we state are based on the assumption that individual school faculties found our program description meaningful and thus could use the information we provided to decide the need which their school might have for the program. In general, we would expect schools which opt to participate in the program to exhibit more need for the capabilities and organizational qualities to which the program addresses itself. Our specific hypotheses consider these needs in terms of the categories suggested by the systems model of Figure 3.3.

Organization structure and process. Since the intervention primarily is aimed at directly altering the structure and process of the school in certain directions, those schools which vote to participate will be those which perceive the need for movement in those directions. Specifically, the OD program centers around improving the structure and process of decision making and problem solving; therefore, we would expect to see participating and non-participating schools differentiated on those structure and process measures most closely associated with decision making and problem solving (as opposed to, say, structure and process of workflow). Improvement in these areas is basically achieved by increasing the participation of teachers in problem solving and decision making. Therefore, our hypotheses for comparing the groups at time one are:

H1: Personnel in schools which opt to participate will, in general, exhibit perceptions of higher levels of hierarchy of authority and lower levels of autonomy than personnel in non-participating schools.

H2: Personnel in participating and non-participating schools will, in general, not differ in their perceptions of the structural dimensions of standardization and task variety.

H3: Personnel in participating schools will, in general, perceive their school to exhibit less group problem-solving behavior in the following stages of the group problem-solving process: evaluation, solution generation, internal diffusion, legitimation, adoption, implementation, and routinization.

H4: Prior to the intervention, personnel in participating schools will perceive themselves as participating in decisions less than personnel in non-participating schools.

Quality of outcomes. Changing the structure and process of decision making and problem solving is done with the ultimate objective of changing the quality of the organizational outcomes. Therefore, schools which are perceived to have lower quality of various outcomes vis a vis other schools will tend to opt for participating in the intervention as a way of improving outcome quality. This general reasoning leads to the following hypotheses:

H5: Prior to the intervention, personnel in the schools planning to participate will, in general, see their schools as being less able to achieve school goals than personnel in non-participating schools.

H6: Prior to the intervention, personnel in participating schools will feel less well-integrated with the school organization than personnel in non-participating schools. Specifically, participating school personnel will experience: less job satisfaction, more role ambiguity, and more role overload.

H7: Initially, participating school personnel will, in general, tend to perceive their schools less favorably than non-participating school personnel perceive their schools. This will tend to hold true for all areas of school functioning.

Influence and resource allocation. These two areas are combined here because they can be considered to be highly related in the perceptions of school personnel. The decision-making process and structure of the school generally function as the mechanism which converts the influence attempts of environmental entities as well as school personnel into some sort of priority schedule for allocating resources. Since we have already hypothesized that participating schools will initially be perceived as less effective (H5), it is reasonable to assume that this perceived state will be attributed to inadequate resources being directed toward school goals. The reason for such inadequacy may be further attributed to faulty priorities due to inordinately large influence exerted by environmental elements and too little influence being exerted by school personnel. The OD program would be seen as a means of redressing these perceived problems.

H8: Prior to the intervention, school personnel in participating schools will perceive less resources and attention being directed toward important school goals than will non-participating school personnel.

H9: Prior to the intervention, participating school personnel will perceive the influence of environmental elements to be greater than will non-participating school personnel. The influence of internal school personnel, i.e., teachers and principals, will be perceived as less in participating schools than in non-participating schools.

Hypotheses about the Summative Effects of the Intervention on Evaluation Questionnaire Measures

The section on formative evaluation design stressed the fact that, realistically, the intervention should not be considered as limited to the training activities and the implementation of the program which follows. In point of fact, all our relations and interactions with district personnel should be expected to have some effect. Thus it is that all schools, not just the participating schools, were sensitized to the issues being confronted by the OD program design; and all schools had a principal who went through a training session. While training for non-participating school principals focused solely on the principal group, it is reasonable to expect that some principals were at least partially able to apply these ideas to the functioning of their schools. In short, the nature of our intervention activities leads us to expect that all schools will tend to move in the same hypothesized direction. Differences between participating and non-participating schools will stem from the relative strengths of the intervention activities they experience. Participating schools will show stronger changes in the hypothesized directions.

Given these general statements, the following sections will develop the hypotheses. Again, we will use the systems model of Figure 3.3. Much of the rationale behind the summative hypotheses is similar to that used in developing the previously stated hypotheses regarding the differences between participating and non-participating schools due to self-selection.

The first hypotheses presented below refer to measures made using the evaluation questionnaire. The results from this questionnaire were not fed back until project termination. Later hypotheses refer to measures made by the school feedback survey. These hypotheses explicitly recognize the fact that results measured by this instrument are partially due to the feedback of the data.

Direct effects of the intervention: organization structure and process. Since the OD program is meant to directly affect these aspects of the organization, we expect that measures of structure and process will change over the duration of the intervention in the direction implied by the degree to which these characteristics occur in the OD program design itself.

Structure. We measured four characteristics of structure with the evaluation questionnaire: job autonomy, job variety, hierarchy of authority, and standardization. We make a separate prediction for each. Job autonomy appears a priori to be subject to conflicting tendencies. To the extent that increased participation in decision making occurs, each teacher may feel greater autonomy; such participation is done in a group context and the teachers may also feel more constrained by group norms and decisions, thus experiencing a feeling of decreasing autonomy. Participating in group problem-solving sessions and performing the various behaviors associated with the seven stage problem-solving process should increase the variety of skills and behaviors which teachers associate with their roles. Hierarchy of authority should decrease in degree because the decision locus for many areas is perceived by teachers as being moved into the teacher domain. (This does not necessarily mean that decision areas are consequently being removed from the principal domain. As has been stated earlier, this OD program is partially based on the premise that before the intervention there are many decision areas in schools under no one's domain.) Finally, standardization should increase because the intervention itself is fairly structured and formalized. Likewise, the creation of group norms would tend to increase standardization.

H10: The intervention will affect the organization structure. Specifically, it is predicted that participation in the intervention will result in teachers perceiving:
- a) no change in job autonomy
- b) an increase in task variety
- c) a decrease in hierarchy of authority
- d) an increase in standardization.

Process. There are many possible analytical dimensions or areas of organization process. Two of the more prominent ones in organization literature are communication and decision making (Hall, 1972). While organizational processes can be analytically separated, in actuality they are tightly interwoven so that, for example, decision making cannot occur without communication and vice versa. The OD program is explicitly based on a problem-solving process which includes several subprocesses and combines both decision-making and communication activities. In fact, such a process concept has assumed various guises in the literature and has gone under the following appellations: problem-solving process, decision-making process, change process, and diffusion or communication of innovation process. Thus the seven-stage process upon which this OD program is based is as legitimate as any other analytical concept for characterizing the organizational processes of any organization. It is obviously useful here because it provides a ready-made set of subhypotheses for characterizing the effect of the intervention on the school's organization process.

H11: The intervention will affect the organization's process. Specifically, it is predicted that participation in the intervention will result in teachers perceiving an increase in the degree to which the following subprocesses of group problem solving occur:

- a) evaluation
- b) solution generation
- c) internal diffusion
- d) legitimation
- e) adoption
- f) implementation
- g) routinization.

Participation in decision making. In the previous section, decision making was classified as one analytical dimension of the organization process. Participation in decision making, however, is not a measure of that process but rather a measure of how that process is structured to include organization personnel. For this reason, we consider participation in decision making to be a hybrid concept, tapping both structural and processual aspects of the organization. The intervention sought to directly manipulate the degree to which and the patterns in which school personnel participated in decision making; not just in those decisions already made but in decisions previously being made by no one. Since participation in decision making is both a structural and processual concept, the intervention itself was both structural and processual in design. Our hypothesis in this area is obvious:

H12: The intervention will affect the degree of participation in decision making. Specifically, it is predicted that participation in the intervention will result in an increase in teachers' perception of their degree of participation in decision making.

Indirect effects of the intervention. Figure 3.3 portrays our simplified view of the organization system. Since the intervention occurs in the structure and processes of the organization itself, the systems model of Figure 3.3 would predict that changes in these aspects of the organization will eventually result in changes in the various types of organizational outcomes and, by way of the feedback loops, eventually result in changes in the environmental influences themselves. These changes, while due to the intervention, are one or more steps removed from the changes directly made by the OD program. Therefore, we have elected to classify them as "indirect" effects--occurring by way of the direct changes made in the organization's structure and process.

From another perspective, we also think of certain outcome changes as the "ultimate" objectives of this intervention. From this perspective, it is plain that changes in organization structure and process are "intermediate" or "instrumental" objectives of the intervention. It is possible that using the term "direct effects" to describe changes in intermediate variables may appear to the reader to be a case of goal displacement, where the means have become the ends. However, we do not intend to imply that direct effects are more important or that indirect effects are less so. We use direct and indirect not evaluatively but descriptively. It is by their hypothesized connection with valued indirect effects that the direct effects of the intervention achieve their importance. Thus, the hypotheses in this section, regarding the indirect effects, are the most closely associated with the ultimate purpose of the intervention.

To the extent that the following hypotheses about indirect effects are not substantiated while those about direct effects are, then secondary analyses should investigate the reason for the "loose coupling" between them. It could be that there is a time lag, and that indirect effects take longer to occur. If indirect effects are found but no direct effects are seen, then secondary analyses must reconsider the causal relationships implied by the model in Figure 3.3.

Resource allocation. If the total amount of resources or emphasis placed on a given set of school goals or objectives is constant, then a change in resource allocation would mean a change in the pattern by which the resources are parceled out among the goals and not a change in total resources. However, we make the assumption that there exists a considerable amount of available resources or emphasis which is not being applied to school goals (which, for example, gets dissipated for individual purposes) and that changes in resource allocation could mean a total increase in resources and emphasis toward a set of school goals. Actually, we expect that this total increase will also be parceled out differentially among the possible school goals to reflect the values emphasized by teachers. Goals emphasized solely by the authority structure should not change in emphasis, but goals more salient to teachers should increase in emphasis and resources committed.

H13: It is predicted that participation in the intervention will result in an increase in teachers' perception of resources allocated and emphasis applied to school goals.

Goal effectiveness. Given our expectations regarding resource allocation, we should obviously expect that those goals which receive increased emphasis and resources will subsequently be more effectively achieved. We also expect that the collective problem-solving structure provides a more effective way of handling problem areas. Therefore, the new structure may more effectively coordinate the already existing efforts toward achievement of school goals, even in the absence of alteration of resource allocation patterns.

H14: It is predicted that participation in the intervention will result in an increase in the degree to which school goals are perceived by teachers as being achieved.

Integration. By integration we mean the various psychological reactions which individuals have with regard to various aspects of the job they perform or the role they occupy. Integration exists to the degree that the needs of the individual are consonant with the needs of the organization. School needs are translated to the individual in terms of job and role variables. If the job and role are incompatible with the individual's needs, the results will be low satisfaction with the job and a high degree of role stress.

H15: The intervention will result in a higher degree of integration of the individual teachers into their schools. Specifically, participation in the intervention will result in teachers perceiving:

- a) higher satisfaction with work itself (intrinsic satisfaction)
- b) higher satisfaction with the work situation (contextual satisfaction)
- c) lower role ambiguity
- d) no change in overload
- e) higher cohesiveness.

This hypothesis is partially supported by cross-sectional analyses which we have run on the pre-test data from this intervention (Mohrman et al., 1976). In this analysis we found that participation in making certain decisions was associated with higher satisfaction.

Environmental influence. The most remote effects we expect from the intervention occur in this area. Once again, if we do not make a zero-sum assumption about the amount of influence which can be exerted, it is possible to predict that collective problem solving will result in integrating the agendas of many internal and external environmental entities regarding school policies and procedures. This, of course, will only happen if the Program Group efforts are integrated with the authority system and take into account the viewpoints of significant other groups. If the program is successfully implemented, both of these conditions should be true.

We expect the teachers' perception of influence over policies and programs to be altered in two ways. The direct effects of the program should be quite strongly related to the influence which their teachers perceive school personnel at the building level to exert.

> H16: The intervention will affect the influence of building-level school personnel (internal environment) on policies and procedures. Specifically, it is predicted that participation in the intervention will result in teachers perceiving greater influence for:
> a) teachers
> b) principals.

Because the problem solving is occurring at the building level (internal environment), teachers will be able to tailor their decisions to the needs of the particular community and group of students they serve. Thus, it can be expected that teachers will perceive their clientele as having more influence over the policies and procedures in their school. This will be a result of their perceptions that they themselves are exercising more influence and making decisions that are in the best interest of the students they teach.

> H17: The intervention will affect teachers' perceptions of external environmental influence patterns. Specifically, it is predicted that teachers will perceive the following groups to have increased influence over programs and policies:
> a) students
> b) parents.

Hypotheses about Summative Effects of the Intervention: School Survey Measures

As mentioned earlier, it is, strictly speaking, not possible to use the School Survey as an unbiased measure of the effects of the intervention. This is because the survey results are fed back to the schools, both participating and non-participating. Because of this, the respondents from the various schools were not only becoming sensitized to certain issues by filling out the survey, but also these testing effects were made even stronger by our categorizing and feeding these results back. As mentioned elsewhere in this report, the content of these feedback data often implied a certain normative stance toward what constitutes a healthy school organization. The implicit norms of the feedback data can themselves create reactions in school personnel depending upon their own normative views of school organization. The evaluation questionnaire, upon which the hypotheses of the previous section were based, did not have such an obvious normative stance and was more descriptive in character. To that extent, it was probably less reactive.

Despite the probable reactive nature of the survey content and the fact that it was fed back, the content of the surveys makes them very valuable for acquiring considerable substantive knowledge about the summative effects of the intervention. The content of the surveys are school specific. As such, the survey items were more meaningful to the respondents. The normative nature of the items gives us invaluable information about the evaluative stance of teachers toward organizational states which may have been only measured descriptively by the evaluation questionnaire results. Furthermore, it was on the basis of these data that participating schools often identified problems. Post-test data from survey questionnaires should be the most sensitive for picking up changes in the perceptions of teachers which can be directly attributed to the solutions which Program Groups generated and implemented to deal with these problems.

In general, the School Survey measured the quality of various attributes of school functioning as they were perceived by the teachers. The responses to each item, and thus each category or scale of items, were interpreted by us as reflecting favorably or unfavorably on the school or the district. It was the percentages of favorable and unfavorable responses to items and scales which were fed back to the schools. More specific descriptions of the actual measures in the School Survey are presented later in this chapter.

General hypothesis. Since the intervention itself is designed to improve the quality of school functioning both directly (by creating a structure more appropriate for dealing with the problems associated with the relevant environment of the teachers and by increasing the quality of the problem-solving and communication processes) and indirectly (by providing a mechanism for dealing with and improving other problem areas in the school), we expect that all measures of the quality of school phenomena have a potential for improving.

> H18: The intervention will affect the degree to which the quality of school functioning is perceived as favorable. In general, it is predicted that participation in the intervention will result in teachers rating their schools as more favorable in a substantial number of the School Survey categories.

While this hypothesis plays it safe by not specifying which categories are expected to increase in favorability for participating schools, we are prepared to come to grips with this issue with two specific hypotheses founded on different rationales.

Specific hypothesis regarding direct effects. The intervention design itself is based on our a priori identification of problem areas in schools. Specifically, we feel that a major underlying cause of unfavorable perceptions of school functioning lies in the organization structure and process of the schools. Our intervention was designed to deal with these problem areas directly. A number of School Survey scales also deal with these problem areas. As a result of the intervention, we expect the perceptions in these areas to reflect more favorably on the schools whether or not the faculty of these schools also identify these areas as problem areas to be confronted by the Program Groups.

> H19: The intervention will directly affect the degree to which the quality of the structure and process of the host organization is perceived as favorable. Specifically, it is predicted that participation in the program will result in teachers rating their schools as more favorable in the following areas:
> a) colleague relations
> b) supervisory/principal relations
> c) performance and development
> d) quality of meetings
> e) administrative practices
> f) voice in educational program

Specific hypothesis regarding indirect effects. It is impossible *a priori* to specify which of the remaining School Survey categories will be affected by participation in the program. Which categories are affected would seem to depend upon which areas the school faculties identify as problem areas and subsequently deal with using the program.

> H20: The intervention will indirectly affect the degree to which the quality of school functioning in certain areas is perceived as favorable *if* schools identify these areas as problem areas and use the mechanisms provided by the intervention to solve the problems. The School Survey scales will be used as a basis for categorizing problem areas.

Hypotheses for Formative Evaluation

There are two areas or foci of formative evaluation: the implementation of the program in the participating schools and the intervention activities of the research team in the district as a whole. The implementation process was begun and proceeded through some formative or developmental process in nine separate schools. There was only one intervention process. We are thus forced to by circumstances to treat our intervention process as a single case study.

Our activities during the intervention, of necessity, set the stage for all the other occurrences in the district regarding the OD program, including the implementation processes in various schools and the availability of information about those occurrences. Given the degree to which our intervention activities constrained and enabled all other activities, we have opted to be as open and complete as possible in describing them throughout this report at the points where such information would prove most beneficial in understanding the data or events being described. In a word, our intervention activities created the context in which all program activities took place. While we could conceivably have made hypotheses about how our intervention activities would create this context and the effects which the context would have, it seems inappropriate to do so. We prefer ex post interpretations of our intervention activities.

The formative processes of program implementation are another matter. Here we have a comparative sample, systematic and comparable data, and a model for conceptualizing the formative process. With this basis, we are able to phrase some general hypotheses.

We need a quick word about the legitimacy of these hypotheses. It is readily admitted that a model which inspired the formative hypotheses has evolved during the intervention itself. But it would be a mistake to consider these hypotheses as being induced post facto from the results of the intervention. The process of formulating the basis for these hypotheses is more accurately termed "retroduction" (Hanson, 1972) or "abduction" (Overholt & Stallings, 1976) and involves a series of adjustments in our basic framework as we experienced the intervention. That framework has its original basis in Suchman's (1967) model of evaluative research as well as an obvious link with cybernetic theory and general systems theory. The following hypotheses create a model of the formative process which provides considerable leverage in understanding the processes of implementation in the various schools. It is in this spirit that they are offered.

The formative hypotheses are based upon a simple model of the implementation of the OD program as an open system within the context provided by the host organization (see Figures 3.1 and 3.4). Implementation is the process performed in the inner box. The implementation process within that box has a structure implied by the OD program design.

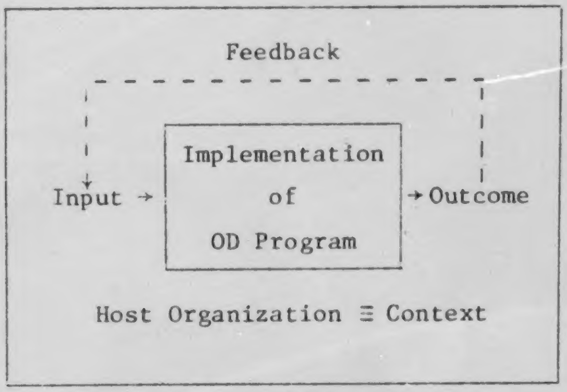


Figure 3.4. The formative process of program implementation as a cybernetic system.

With this model four relevant questions about the implementation process become salient. First, what kind of outputs does implementaion of the OD program create? The answer to this question is partially anticipated by the hypotheses made for summative evaluation. Second, how does the degree to which program implementation achieves the ideal prescribed in the program design relate to the outputs of implementation? Third, what impact do the effort and inputs supplied by host organization personnel have in determining the degree of implementation and the program outputs? Fourth, what are the characteristics of the implementation context provided by the host organization which help determine input, implementation, and output? If fact, we should expect that the context provided by the host organization will determine the feedback upon which the implementation process will adjust itself.

Any evaluation of the formative process of implementation must consider the entire system of input, process, output, and feedback. All these aspects of the cyclical system are occurring simultaneously. Understanding the system requires knowledge of these aspects as they occur within the particular organizational contexts. The relationships among inputs, implementation, outputs, and context are complex. For analytical reasons, it makes sense to begin by separating these system aspects. The cyclical nature of the ongoing system makes the choice of independent and dependent variables arbitrary. In the intervention, however, certain parts of the system came first. In the beginning, there was the host organization context. As a result of the intervention activities, personnel in the schools input effort and other resources into initiating and continuing the process of implementing the OD program. The degree to which program implementation achieved the ideal varied. The most concrete results of program implementation were solutions to school problems. Other indicators of program effect are attitudinal and perceptual changes as measured by questionnaire data.

Hypothesis Regarding the "Fit" between the Program Design and the Context Provided by the Host Organization

The program does not become implemented in a vacuum. Much of what takes place is influenced by the pre-existing state of affairs in the school. Rather than separate out all the possible phenomena of the organization context and one by one hypothesize their impact on implementation, the concept of "fit" is used. By "fit" we mean the degree to which the existing organization embodies a model of organization functioning which is congruent to or similar to the model of organization functioning embodied in the OD program design. Operationally, this state of "fit" will exist to the extent that school practices prior to implementation approached the group problem-solving mode or to the extent that the principal is sympathetic to going in that direction.

A congruent context (i.e., a high degree of fit between context and program) affects different aspects of the cybernetic cycle in different ways. For instance, a congruent context may make it more likely that school personnel will put in a high degree of effort, since past experience and/or principal legitimation will have created the expectancy that efforts of this type lead to results. Or, in terms of the program's problem-solving process and structure, a congruent context will facilitate a high degree of implementation. Finally, the nature of the feedback caused by program outcomes also will depend on the context/program fit. Positive feedback (reactions) which tend to amplify the program implementation will occur in congruent contexts. Negative feedback (reactions) may result either in adjustments to the implementation process so that implementation can continue in some altered form, or may simply stifle all input effort, in which case implementation would cease.

H21: The more the organizational context provided by the school is congruent with the process and structure of the OD design, the more effective and productive the program will be.

Program effectiveness is conceived here in terms of the organizational ramifications which program implementation is hypothesized to have in terms, for example, of improving goal effectiveness and teacher satisfaction. By productivity, we refer to the more immediate and tangible outcomes of implementation, i.e., solutions generated and implemented by the problem-solving process. Utilizing School Survey improvements and hypothesized changes in the evaluation questionnaire as indicators of program effectiveness and solutions implemented as indicators of productivity, we have constructed a summative measure called Program Effect, which serves as the dependent variable for many of our formative hypotheses.

Hypotheses Regarding Inputs into Implementation

There are a number of things which can be considered to be inputs into the process. Chiefly, we would focus on information and energy or effort. Much of the information which school personnel can provide to the implementation process is that which has been provided them through the intervention activities of our team, such as training. We make the assumption that information inputs to implementation in the various schools are relatively equal. Thus, the major input which we observe to differ among the schools is the energy or effort supplied by school personnel.

It is common sense to expect that those programs which are productive must of necessity have had a reasonable amount of effort provided by participants. One does not get something for nothing. At the same time, the presence of much effort does not guarantee a productive program. There are other factors which can act to negate the input effort.

H22: High effort by school personnel into the implementation of the OD program is a necessary but not always a sufficient antecedent for a productive and effective program.

In the last section, we suggested that a congruent context may make it more likely that school personnel would put forth a high degree of effort. It is also sensible to expect that a non-congruent context will necessitate greater effort in order to overcome negative feedback or forces working against the program. Thus, a second hypothesis concerning effort is as follows:

> H23: In schools with an initially non-congruent context, higher effort will be required to generate a program effect than in schools with an initially congruent context.

Hypotheses Regarding the Degree of Implementation

The OD program design is normative; it is prescribed as an ideal to strive for. Implied within this prescription is the assumption that the design corresponds to some optimal or at least highly satisfactory mode of behavior under the circumstances provided by schools. Thus, we should expect that the more productive and effective programs will occur in those schools where implementation most closely conforms to the ideal. In operational terms this would happen when school personnel utilize all the components of the program which we have provided and when school personnel follow the guidelines presented in program materials.

> H24: Program Groups which achieve a higher degree of program implementation, as designed, will tend to be more productive and effective.

According to the systems model, program implementation will emerge as a result of effort input to the system and the context provided by the organization. Our second hypothesis concerning program implementation is as follows:

> H25: The degree of program implementation will be higher in schools where the context is more congruent and effort is high.

Hypotheses about Feedback and Adjustment

In the section above concerning the organizational context, it was stated that congruent contexts would provide positive feedback and non-congruent contexts would provide negative feedback concerning program implementation. As the implementation adjusts itself to the negative feedback encountered in initially incongruent contexts we expect that two kinds of adjustments will take place (if the program continues). First, the program participants will alter the design components of the program, such as the domain of issues with which the program group deals or the practices recommended in training, in an effort to create a better fit between that which the program does and current school practices. Second, program personnel will begin to engage in various strategies which are designed to change the context so that the fit is increased. Over time, this dual process of adjusting the design and domain of the OD program and "managing" the context to become more compatible will result in a better fit and, over the long run, initially less effective and less productive instances of implementation will become more effective and productive.

It is clear, however, that this type of adjustment process will require considerable effort input by program participants. If that effort is not forthcoming, the implementation will cease. It is also clear that the strategies which schools pick to change the context will differ in their utility for making change happen. School faculties which pick poor change strategies will not increase the context/program fit and implementation will eventually cease.

The hypotheses in this section are stated less formally than earlier hypotheses because of the variety of different adjustment processes possible. We expect to find the following four general types of adjustment processes in schools, reflecting the negative feedback which the Program Group receives from its context:

1) efforts to alter the context to make it more congruent with the OD program;
2) changes in the program design components to enhance the fit between the OD program and the context;
3) alterations in the decision domain being considered by the group to enhance the integration of the OD program with the school context; and
4) changes in the program personnel to alleviate sources of strain.

Finally, we expect that such dynamic adjustment processes will be more prevalent in "high effort" schools and in schools with an intially incongruent context.

Methods and Operationalizations for Data Gathering

Since this intervention was pursued as a field experiment, there are really two issues of operationalization. The first has to do with the experimental manipulation used to alter the problem-solving process and structure in the schools. The manipulation is described at length elsewhere in this report in the sections covering our intervention activities. The summative hypotheses about direct effects in part constitute a manipulation check on the OD program.

The second issue is in regard to operationalizations of the many organizational and individual variables and concepts which we measured throughout the program. These operationalizations are discussed in this section.

Scales from the Evaluation Questionnaire and School Survey

The scales reported here are those made up of items repeated on the pre- and post-questionnaires. In most cases, the pre-test scales had considerably more items than those we have used in this report. The longer scales sometimes were preferable to the shortened scales we finally used. The drastic pruning of the original scales was necessitated by the pressure we felt from district personnel in reaction to the extensive and multiple questionnaires to which we subjected them in the pre-test. This shortening of scales could reduce their value in at least two ways: (1) the reliabilities of the scales were reduced by the decrease in the number of items used; and (2) the completeness and breadth of information was sacrificed. Nevertheless, the scales used are generally of acceptable reliability and still cover most of the major areas of interest in understanding the effects of the OD program.

Scale reliabilities. Table 3.3 reports the scales used and the reliabilities computed for those scales using two different data pools: (1) pre-test responses of elementary faculties and (2) post-test responses of elementary faculties. The number of items in each scale is also reported. Reporting the scale reliabilities at both times gives a sense of the reliability of these constructs over time. In general, the reliabilities remain fairly constant. Only scales are reported here; many questionnaire measures were used as individual items.

Operationalizations. The final section of Chapter One provided a brief description of the conceptual thrust of each variable which our evaluation questionnaire scales and items operationalize. These variables were, in that chapter, classified by an open systems model of the organization. This section presents the actual items which we used to measure these variables and constructs.

In addition to the measures used in the evaluation questionnaire, we also present the items and scales used in the School Feedback Survey. The motivation behind this instrument was not research-based but rather action-based and task-oriented. The School Feedback Survey used here is a

Table 3.3

Reliabilities for Various Questionnaire Scales:
School Survey and Evaluation Instrument, Elementary Schools

Scales	Reliability Coefficient Alphas[1]		Number of Items
	Pre-test	Post-test	
EVALUATION QUESTIONNAIRE	(N=181)[2]	(N=157)[2]	
Group Problem Solving			
Evaluation	.73	.67	3
Solution generation	.71	.72	4
Internal diffusion	.58	.48	3
Legitimation	.67	.73	3
Adoption	.68	.59	3
Implementation	.61	.66	3
Routinization	.61	.68	4
Participation in Decision Making			
Actual participation in operational/ instructional decisions	.71	.63	5
Actual participation in policy decisions	.74	.53	7
Should participate in operational/ instructional decisions	.77	.69	5
Should participate in policy decisions	.70	.80	7
Organization Structure			
Standardization	.45	.60	3
Autonomy	.63	.56	4
Variety	.69	.65	3
Hierarchy of authority	.70	.75	4
Integration			
Cohesiveness	.69	.80	3
Role ambiguity	.79	.86	5
Role overload	.78	.91	3
Intrinsic satisfaction	.81	.87	4
Contextual satisfaction	.77	.82	4

Table 3.3 (continued)

Scales	Reliability Coefficient Alphas[1]		Number of Items
	Pre-test	Post-test	
SCHOOL SURVEY	(N=104)[2]	(N=91)[2]	
Internal Relations			
Supervisory relations (principal)	.87	not computable[3]	4
Administrative practices	.74	.63	3
Colleague relations	.79	.87	6
Professional support	.82	.87	3
Staff integration	.64	.73	3
Professional Climate			
Performance and development	.74	.70	4
Faculty voice in educational program	.62	.53	4
Participation in program setting	not computable[4]		2
Responsiveness to faculty	not computable[4]		2
Work Load			
Professional work load (quality of meetings)	.49	.51	3
Non-professional work load	.68	.53	3
Facilities			
Materials and equipment	.54	.63	3
Building and facilities	.51	.53	3
School Performance			
Educational effectiveness	.76	.73	6
Evaluation of students	.65	.64	6
Cognitive evaluation	.70	.60	3
Student placement	.64	.54	3
Special services	.71	.74	7
Services for special children	.53	.67	4
Services for student and staff improvement	.74	.54	3

Table 3.3 (continued)

Scales	Reliability Coefficient Alphas[1] Pre-test	Reliability Coefficient Alphas[1] Post-test	Number of Items
SCHOOL SURVEY (continued)	(N=104)[2]	(N=91)[2]	
Client Relations			
School community relations	.59	.63	6
Community influence	.72	.81	3
Community interest	not computable[4]		
Students	.46	.31	3

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[1] Cronbach alpha coefficients were computed by an SPSS reliability routine developed at Vogelback Computing Center, Northwestern University.

[2] The sample sizes are low because reliability analyses were performed using only those respondents completing all items in the questionnaires.

[3] Not computable due to an indefinite operand.

[4] Not computable because of two-item scales.

shortened and considerably altered version of the original instrument developed by Coughlan (1964) and used by Coughlan, Cooke, and Safer (1972). The items are school specific and evaluative in their wording. This was done to increase the relevance and motivating impact of feedback based on faculty responses to them. Although not the primary purpose of this questionnaire, its measures are not inappropriate for research and evaluation purposes. Indeed, the school specific wording increases the face validity and the interpretive potential of these items. Tables 3.4 and 3.5 present the scales and items as used from the two questionnaires.

To repeat, the items and scales which are presented in Tables 3.4 and 3.5 are those scales which were in the post-test questionnaire and thus are the only measures by which we can gauge any perceived changes from pre- to post-test. The two pre-tests, which were taken by each respondent and consisted of one of the School Feedback Surveys and the evaluation questionnaire, were much more extensive. Therefore, the data fed back to initiate the process in the first year were considerably more extensive than those of the second year. Furthermore, the data fed back in the first year were more tailored to the level of the school, secondary or elementary. All the pre-test instruments and the feedback forms based on them appear as Appendices C, D, E, and F. The post-test survey-evaluation questionnaire and the feedback form based on it are presented as Appendices G and H. The principal survey remained relatively the same from pre-test to post-test; however, its non-comparable formatting did not allow us to combine its results with the teacher results.

Table 3.4

Evaluation Questionnaire Items
Operationalizing Organizational System Constructs

Construct and Scale Names	Meanings and Items
Environmental Influence	Definition: the extent to which environmental elements (internal and external) are perceived to influence school policies and programs Items: indicate how much influence each group has on policies and programs in this school: (1) students, (2) teachers, (3) principals, (4) central office, (5) board of education, (6) parents, (7) the AFT and affiliates, (8) the state government, (9) the federal government, (10) community agencies (e.g., police, parks, city government, etc.) Responses: five-point scale "none" to "very strong"
Organization Structure	Responses: six-point scale "strongly agree" to "strongly disagree"
Standardization (alpha = .45)	Definition: the degree to which procedures and responsibilities are perceived to be spelled out Items: *1. We have procedures to follow in dealing with most situations that might arise in this school. *2. The administration adheres to established rules and regulations in dealing with the teaching staff. *3. I always have the same areas of responsibility in performing my job.
Autonomy (alpha = .63)	Definition: the degree to which people feel free to determine how they do their own job Items: *1. When faced with a situation that is new and not covered by existing procedures, I feel free to adapt to the requirements of the situation. *2. How things are done around here is left pretty much up to the person doing the work. *3. I have the necessary authority to make changes in how I do my job when situations require it.

Table 3.4 (continued)

Construct and Scale Names	Meanings and Items
Autonomy (continued)	*4. Most people here make their own rules on the job.
Variety (alpha = .69)	Definition: the degree of variety or non-routineness perceived in people's job Items: 1. I would describe my job as being routine. *2. Most jobs here have something new happening every day. *3. One thing people like around here is the variety in their work.
Hierarchy of authority (alpha = .70)	Definition: the degree to which decision making is perceived to be centralized or the degree to which decisions are perceived as having to be referred upwards Items: *1. Even small matters have to be referred to someone higher up for a final answer. *2. Following established rules and procedures, even when they don't seem appropriate to the situation, is the safest course to follow around here. *3. A person who wants to make his or her own decisions would be quickly discouraged here. *4. Whenever we have a problem, we are supposed to go through formal channels for an answer.
Participation in Decision Making	Responses: five-point scale "never" to "always"
Actual participation in operational decisions (alpha = .71)	Definition: the degree to which respondents perceive themselves to actually participate in decisions dealing with instructional and other operational decisions Items: please indicate how frequently you actually participate in these decisions: 1. selecting specific instructional texts 2. resolving learning problems of individual students 3. determining appropriate instructional methods and techniques 4. establishing general instructional policies 5. establishing classroom disciplinary policies

Table 3.4 (continued)

Construct and Scale Names	Meanings and Items
Actual participation in policy decisions (alpha = .74)	Definition: the degree to which respondents perceive themselves to actually participate in managerial and administratively-oriented policy decisions Items: (same instructions as above) 1. hiring new professional personnel 2. planning school budgets 3. determining specific professional assignments 4. resolving employee grievances 5. planning new buildings and facilities 6. resolving problems with community groups 7. determining professional salaries
Should participate in operational decisions (alpha = .77)	Definition: the degree to which respondents feel they should participate in decisions dealing with instructional and other operational decisions Items: (same instructions as above) 1. selecting specific instructional texts 2. resolving learning problems of individual students 3. determining appropriate instructional methods and techniques 4. establishing general instructional policies 5. establishing classroom disciplinary policies
Should participate in policy decisions (alpha = .80)	Definition: the degree to which respondents feel they should participate in managerial and administratively-oriented policy decisions Items: (same instructions as above) 1. hiring new professional personnel 2. planning school budgets 3. determining specific professional assignments 4. resolving employee grievance 5. planning new buildings and facilities 6. resolving problems with community groups 7. determining professional salaries
Group Problem-solving Process	Responses: six-point scale "strongly agree" to "strongly disagree" General definition: the extent to which the faculty as a group is perceived to go through each of seven stages that can constitute a group problem-solving process

Table 3.4 (continued)

Construct and Scale Names	Meanings and Items
Evaluation (alpha = .73)	Definition: the identification and diagnosis of problems Items: *1. School problems and needs have been carefully analyzed in terms of their basic reasons and causes. 2. Faculty meetings and committees have not been utilized effectively for the identification of specific school problems. *3. In this school, faculty members are given sufficient opportunity to discuss and define school goals.
Solution generation (alpha = .71)	Definition: developing alternative solutions to problems Items: *1. The administration supports and encourages faculty in developing new teaching practices. *2. Meetings and group sessions are regularly conducted so faculty members can solve problems as a team. 3. Very few faculty members participate in solving problems and identifying new alternatives. 4. Many of the people in this school are not keeping abreast of the changes and innovations that are occurring in education.
Internal diffusion (alpha = .58)	Definition: the communication of proposed changes to other organization members who would be affected Items: 1. There has been insufficient communication across grade levels concerning changes that are needed in our educational program. *2. Faculty members have been provided with sufficient opportunity to discuss new ideas for change with teachers from other schools in this district. 3. Information about proposed changes more often flows down than up the organizational hierarchy in this school district.

Table 3.4 (continued)

Construct and Scale Names	Meanings and Items
Legitimation (alpha = .67)	Definition: attaining approval from appropriate authority for particular solution at hand Items: 1. Decisions get "hung up" in committees in this school and district. 2. Decisions made by this faculty are sometimes ignored or reversed by the administration. 3. It takes an excessive amount of time to get new ideas approved in this district.
Adoption (alpha = .68)	Definition: acceptance by the group of the proposed solution in its final form Items: 1. Faculty members have often disliked many of the changes made in this school. *2. Ideas, solutions, and changes preferred by the district administration are generally consistent with those preferred by the faculty. 3. New programs adopted in this school are often not tailored to the problems we have.
Implementation (alpha = .61)	Definition: putting the solution into practice 1. Ideas for change that are presented and promoted by faculty members are rarely implemented. 2. The manner in which changes are made in this school sometimes creates problems for the teacher. *3. There has been good communication between the faculty and the principal concerning the success or failure of new programs.
Routinization (alpha = .61)	Definition: continuing the new practice as standard organization procedure Items: *1. Any problems caused by new programs are effectively dealt with. *2. Attempts have been made, either formally or informally, to evaluate the effectiveness of new programs.

Table 3.4 (continued)

Construct and Scale Names	Meanings and Items
Routinization (continued)	3. Attempts to change or innovate in this school have not had much effect on this school's actual performance. 4. For one reason or another, new programs and innovations are often discontinued.
Resource Allocation (items are not scaled)	Definition: the perceived degree to which ten representative school goals are given attention and resources Items: indicate how much each goal is stressed in your school (by indicating how much attention and resources it receives): 1. to develp a highly qualified professional staff 2. to implement a comprehensive and integrated instructional program 3. to provide a positive and supportive school environment and atmosphere for students 4. to provide ongoing evaluation of programs for modification and development 5. to experiment with promising educational innovations 6. to be responsive to the needs, concerns, and desires of the community 7. to communicate to the public objectives, operations and results of educational programs 8. to promote educational achievement of minority students 9. to coordinate school activities with those of relevant community groups and agencies 10. to lessen disciplinary problems Responses: five-point scale: "none," "little," "some," "considerable," " major"
Goal Effectiveness (items are not scaled)	Definition: the degree of effectiveness to which ten representative goals are perceived to be achieved Items: how effective is your school in achieving each goal? (same list of goals as used in Resource Allocation) Responses: five-point scale: "not at all," "barely," "somewhat," "effective," "extremely"

Table 3.4 (continued)

Construct and Scale Names	Meanings and Items
Integration	
Role ambiguity (alpha = .79)	Definition: the degree to which respondents perceive various aspects of their role to be unclear or about which they have insufficient information Items: indicate how frequently you are bothered by each of the following feelings: 1. feeling that you have too little authority to carry out the responsibilities assigned to you 2. being unclear on just what the scope and responsibilities of your job are 3. the fact that you can't get information needed to carry out your job 4. feeling unable to influence your immediate superior's decisions and actions that affect you 5. not knowing just what the people you work with expect of you Responses: five-point scale: "never," "rarely," "sometimes," "rather often," "nearly all the time"
Role overload (alpha = .78)	Definition: the degree to which respondents perceive too many demands being made on them in their roles Items: indicate how frequently you are bothered by each of the following feelings: 1. thinking that the amount of work you have to do may interfere with how well it gets done 2. feeling that you don't have time to do everything others ask of you 3. feeling that you don't seem to have enough time to get things done Responses: (same as for role ambiguity)
Intrinsic satisfaction (alpha = .81)	Definition: satisfaction perceived to stem from aspects of the work or the job itself Items: indicate your degree of satisfaction with each of the following aspects of your job: 1. the feeling of self-esteem and self-respect you get from being in your job 2. the opportunity for personal growth and development in your job

Table 3.4 (continued)

Construct and Scale Names	Meanings and Items
Intrinsic satisfaction (continued)	3. the feeling of worthwhile accomplishment in your job 4. your present job when you consider the expectations you had when you took the job Responses: six-point scale "very dissatisfied" to "very satisfied"
Contextual satisfaction (alpha = .77)	Definition: satisfaction perceived to stem from the context or situation in which respondent performs job Items: indicate your degree of satisfaction with each of the following aspects of your job 1. the amount of supervision you receive 2. the opportunity, in your job, for participation in the determination of methods, procedures and goals 3. the amount of respect and fair treatment you receive from your superiors 4. the feeling of being informed in your job Responses: (same as for intrinsic satisfaction)
Cohesiveness (alpha = .69)	Definition: how strongly respondents identify with and feel attracted to their school and faculty Items: how strongly do you agree or disagree with each statement? *1. I look forward to being with people in my faculty each day. *2. I feel I am really a part of my school. 3. I do not have confidence and trust in the people I work with. Responses: six-point scale "strongly agree" to "strongly disagree"

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* The scoring of these items has been reversed so that a high score indicates more of the property or activity indicated by the scale name.

Table 3.5

School Feedback Survey Items as Grouped into Substantive Categories and Scales

Categories/Scales	Items[1]
Client Relations	
School community relations (alpha = .59)	1. There are effective channels of communication between the faculty and the school board.
-Community influence (alpha = .72)	1. The parents of individual students exert too great an influence on the professional work of this school.
	2. Parent organizations exert too great an influence on the professional work of this school.
	3. Certain community groups exert too much influence on the professional work of this school.
-Community interest (no alpha)	1. In general, the parents of the students here are interested in helping us educate their children.
	2. Relations between the parents of students and the staff of this school need to be improved.
Students (alpha = .46)	1. Student absences are excessive in this school.
	2. The students I work with present an unusual amount of discipline problems.
	3. Too many students here seem more interested in getting grades than in learning.
Internal School Relations	
Colleague relations (alpha = .79)	
-Professional support (alpha = .82)	1. Teachers in this school are genuinely interested in helping each other with teaching problems.
	2. People in this school provide one another with great support and encouragement.
	3. Teachers and other professional personnel in this school freely share ideas and materials.
-Staff integration (alpha = .64)	1. Many people here are more concerned with their own personal interests than with the overall welfare of the school.

Table 3.5 (continued)

Categories/Scales	Items
-Staff integration (continued)	2. There are many cliques or groups in this school that create a non-professional atmosphere.
	3. Some of the faculty in this school think they run the place.
Supervisory relations (alpha = .87)	1. My principal fails to serve as a communication link between the teachers and the district administration and the school board.
	2. My principal usually "goes to bat" for us with his/her superiors.
	3. Our principal sometimes fails to concern himself/herself with important educational matters faced by the faculty.
	4. My principal backs me up in my dealings with parents.
Administrative practices (alpha = .74)	1. District administrators fail to concern themselves with important educational matters faced by the faculty.
	2. In so far as they affect me, the decisions made by the central office administration are fair and equitable.
	3. District administrators seem to take teachers' viewpoints into account when making decisions affecting the teaching staff.
Professional Climate	
Performance and development (alpha = .74)	1. The procedures for judging my performance are helpful to me in improving my work.
	2. A teacher in this school can develop a sense of professional competence.
	3. I do not understand how my work performance is evaluated.
	4. I'm rarely told whether or not I'm doing good work.
Faculty voice in educational program (alpha = .62)	
-Participation in program setting (no alpha)	1. The superintendent and his/her assistants seem to show a real interest in obtaining our ideas and suggestions.

Table 3.5 (continued)

Categories/Scales	Items
-Participation in program setting (continued)	2. We are seldom kept informed about what the school board and top administration are thinking.
-Responsiveness to faculty (no alpha)	1. The administration usually tries to take action on faculty complaints.
	2. It is easy to appeal decisions made in this district which affect me adversely.
Facilities	
Materials and equipment (alpha = .54)	1. The quality of supplementary materials for student use here needs to be greatly improved.
	2. The instructional materials provided for my use here are very satisfactory.
	3. I have sufficient supplies for my work.
Building and facilities (alpha = .51)	1. We have adequate facilities in which students can work individually or in groups.
	2. There are adequate space and equipment for carrying out my work--including desk space, drawers, bookshelves and the like.
	3. Adequate facilities are available for my use during off-periods for grading papers, meeting with students and parents, and the like.
Work Load	
Professional work load (quality of meetings) (alpha = .49)	1. Most of the meetings I am required to attend here are worthwhile.
	2. Our committee efforts and reports are frequently ignored.
	3. I am asked to spend too much time in meetings.
Non-professional work load (alpha = .68)	1. I am required to do too much administrative paper work (attendance reports, tardy slips, statistical reports, etc.).
	2. I am required to perform too many non-professional duties here (playground, hall, stairs, lunchroom and study hall duties).
	3. I receive sufficient clerical assistance to do my job effectively.

Table 3.5 (continued)

Categories/Scales	Items
School Performance	
Educational effectiveness (alpha = .76)	1. This school does a good job of preparing students to be responsible citizens.
	2. The learning experiences in our school are diverse enough to accommodate the needs of most children.
	3. In my opinion, adequate educational standards are being upheld in this school.
	4. Our instructional program enables students to work at the pace that is best for them.
	5. This district has not given sufficient consideration to the problems posed by socioeconomic differences among students.
	6. Insufficient attention is directed toward developing the basic reading and writing skills of our students.
Evaluation of students (alpha = .65)	
-Cognitive evaluation (alpha = .70)	1. Our student achievement and aptitude testing programs are insensitive to the cultural differences among our students.
	2. We lack satisfactory procedures in this district for evaluating student progress (e.g., achievement tests).
	3. I am provided with useful information through our student aptitude and achievement testing programs.
-Student placement (alpha = .64)	1. I'm essentially in agreement with the school's policies on the placement of students into instructional levels, special programs, etc..
	2. Most of the students I work with are placed at the instructional level that is best for them.
	3. We should re-examine our tracking and ability grouping policies.
Special services (alpha = .71)	
-Services for special children (alpha = .53)	1. The work of bilingual instructors in this district is well coordinated with the work of the classroom teachers.

Table 3.5 (continued)

Categories/Scales	Items
-Services for special children (continued)	2. This school system effectively provides for the needs of students who speak a language other than English. 3. The work of learning disability specialists in this district is well-coordinated with the work of classroom teachers. 4. Psychological services generally meet the needs of our students.
-Services for student and staff improvement (alpha = .74)	1. Effective remedial help is available to any of my students who need it. 2. We receive effective assistance in diagnosing the learning difficulties of individual pupils. 3. Effective curriculum assistance is provided classroom teachers in this school.

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[1] Items are both positively and negatively worded. The possible responses were on a five-point scale: (1) strongly agree, (2) agree, (3) undecided, (4) disagree, and (5) strongly disagree. A sixth option was "not applicable," which is counted as missing data in all our calculations. Positively worded items were reverse scored so that a low score for any item was interpreted as reflecting unfavorably on the item's referent, while a high score was interpreted as reflecting favorably on the referent.

Other Measures

In addition to the questionnaires discussed at length in this chapter, other methodologies were used to collect data. These include observation, archives, monitor forms, and interviews. The ways in which these methods operationalize concepts are discussed in subsequent chapters; at the same time data are presented which have been gathered by them.

The next chapter begins our actual analysis of the data which we have available in order to test the hypotheses we have made and to discover additional differences or similarities between the participating and non-participating schools.

CHAPTER FOUR

THE INITIAL STATES OF THE SCHOOL ORGANIZATIONS: COMPARISONS BETWEEN PARTICIPATING AND NON-PARTICIPATING SCHOOLS AND COMPARISONS AMONG PARTICIPATING SCHOOLS

Introduction

We have already mentioned the fact that district schools either self-selected into our experimental, i.e., participating, group of schools or opted not to participate and thus were used by us as a non-equivalent "control" group for evaluation purposes. Since we have pre-implementation questionnaire and demographic data for both groups of schools, we can, and should, test the degree to which our assumption that the groups are not equivalent is actually borne out in the empirical data. We do this in the first part of this chapter. But investigating the degree to which the two groups of schools differ also reveals the ways in which they differ. Hypotheses have already been made in Chapter Three about the substantive differences in the two groups. This chapter tests these hypotheses and also comments on possible explanations for the differences which are found, whether or not these differences are as hypothesized. Focusing on these substantive differences yields information which contributes to our ability to answer two theoretically important questions: (1) what are the characteristics which lead to the adoption (as opposed to an OD program implementation) by an organization? and (2) in what ways do the initial characteristics of an organization at the time of adoption relate to the subsequent implementation of that change by the organization?

The issue addressed by the first question can be thought of in another way. That is, if we can consider the decision to participate as just that--

a decision--then a comparison between participating and non-participating schools may well reveal the salient criterion variables which school personnel openly considered or which subtly played a part in their decision function or decision process.

We deal with the issue which the second question raises in Chapters Seven and Eight on formative evaluation. Systems theory often makes the assumption that subsequent events are "state-determined" (e.g., Sommerhoff, 1969) so that results at a later time are completely determined by the initial state of a system given the function or process which transforms that state over time. In this sense, then, the initial state of our various participating school organizations determines and thus helps explain the results which we will be reporting in subsequent chapters. This chapter, thus, sets the stage for subsequent reporting of the process and results of the implementation of the program design.

The remainder of this chapter is divided into two parts. The first focuses on the comparison between the two groups of schools. Making such a comparison serves multiple purposes. It reveals the degree to which the two groups of schools are or are not equivalent and, if not equivalent, the areas in which they differ. In doing so, it substantiates or contradicts our emergent and somewhat inchoate theories about what factors are at work when an organization decides whether or not to adopt at least one kind of organizational innovation being peddled by an external agent.

The second part of this chapter deals only with those schools which chose to participate. The initial demographic characteristics of these schools are presented and compared. One purpose will be to establish the range of characteristics represented by these participating schools. For instance, did the self-selection process yield a rather homogeneous group of participating schools? Another purpose is to describe the initial states of these schools so that the reader can begin to become familiar with the various sites of program implementation.

Comparing Participating and Non-participating Schools

The Context in Which Self-selection Took Place

The second chapter described the entry process which we went through in the host district. This entry process was part of our intervention activity and thus we must expect that it functioned as a rudimentary intervention in the district and probably had an impact on the choice which schools made regarding participation in the program. Our entry activities also provided us with some observational data relating to schools which chose to participate and those which did not.

We had noticed many reasons why schools seemed to reject the program. (1) Many people simply did not understand the program. It is a complex one, difficult to explain in a short session, subject to misinterpretation. (2) It was sometimes perceived and lobbied against as some type of academic "rip-off" designed to create Ph.D. dissertations. (3) There was uncertainty about its point of origin. Some people were suspicious that this program was initiated by the district and mistrusted the data collection. (4) To many, the program looked like a new round of proliferating committees. Many committees had been set up by the departing superintendent with the perceived results being mainly frustration and wasted effort. (5) There was concern that the central office did not, in fact, support the project. The departing superintendent was perceived as its sole advocate in the central office.

Most basically, however, many individuals either: (6) saw no need for such a program in their school, sometimes because a structure akin to that of the program already existed in their school, or (7) did not see the benefits coming from the program to be worth the effort.

The forces working for acceptance of the program can be somewhat more systematically developed. Fundamentally, teachers (and sometimes principals) accepted the program because there was a felt need caused by the situation in the school or district. This felt need could be traced to either or both of the following. (1) There existed a problematic or uncomfortable situation in the school. In this case, acceptance was basically a reaction caused by the situation. (2) There was a discrepancy sensed between the way things were carried out in the school and the way things should be carried out. This represents a proactive stance and seems to be tied up with a "professional" approach to the educator's role.

The existence of needs had to be coupled with a belief that the OD program did fit those needs and that it was a legitimate way of dealing with educational and school problems. In the more difficult situation, this may have been more of a hope than a belief. Opinion leadership appears to have played a role in establishing this belief. Teachers and principals who attended earlier sessions in the entry process often set the tone for subsequent acceptance--or rejection--by their school faculty.

Finally, the entry process itself set the stage for acceptance of the program by schools. The "democratic" process allowed some higher level administrators and even principals not to take a stand on something they viewed with a jaundiced eye. If these people had been pushed for commitment, it may not have been forthcoming. The entry process by default put the final decision in the hands of those who could most identify with the needs the program was designed to deal with and the legitimacy of the approach.

Group Differences on Perceptual Measures

Based on the above, we expected there to be systematic differences between the schools voting to participate and others. A natural sort of comparison to make is to do t-tests on the means of the two school groups using pertinent scales available on the School Survey and the evaluation questionnaire. Since the situation in secondary schools is qualitatively different from elementary schools, the following comparisons will be performed only between participating and non-participating elementary schools.

The comparisons made are guided by the hypotheses about group pre-test differences which were presented in Chapter Three. The reader will recall that the hypotheses were developed on the basis of the systems model first presented in Chapter One and again presented in Figure 3.3. The specific hypotheses will be restated here as a basis for looking at the comparative data. The rationale behind the hypotheses appears in Chapter Three.

The t-tests used to test the significance of measured differences have been calculated twice. Each test has been done at two different units of analysis: organizational and individual. Since adoption of the OD program is, in the final analysis, something which the school and not the individual undertakes, the most statistically defensible unit of analysis is the school. For this reason, t-tests have been computed using the school means on each variable as the data points. The group of elementary schools opting to participate has an N of eight. For non-participating elementary schools the N is also eight. The data from a ninth non-participating elementary school were omitted due to a relatively poor response rate. Data from all secondary schools were also omitted because of the non-comparability of organizational types and sizes and because only one of the five secondary schools chose to participate.

We have also computed all the t-tests at the individual unit of analysis. One reason for doing this is based on the fact that it was individual perceptions which provided the basic information input into the decision process by which the faculty of each school determined whether or not to participate. Shifting to the individual level of analysis, therefore, enables us to detect substantive aspects of individual perceptions which do tend to differentiate between the two groups of schools but which t-tests conducted with the organization as the unit of analysis are not sensitive enough to detect.

Tests of hypotheses. Tables 4.1a and b report the comparisons of means of participating and non-participating groups for the School Survey and evaluation questionnaire scales. Also reported on this table are the instances when t-tests reach acceptable levels of significance. The group means reported are computed on individual units of analysis. These means differ only slightly from the means computed on the organization level of analysis, due to missing value conventions used in aggregating to the organization level and differing numbers of respondents from schools. Both sets of means are not reported purely for simplicity of presentation. The reader loses very little information by our doing this since the pattern of means is identical whether means are computed on individuals or schools. When each of the individual hypotheses is being discussed, a summary table is presented which reports the pertinent scales and the t-test levels of significance. Complete data are always available in Tables 4.1a and b.

Since schools self-selected after hearing a presentation about the

Table 4.1a

School Survey Data: Comparisons of Participating and Non-participating Elementary Schools before the Intervention (Individual[1] and Organizational Levels)

	Partici-pating $\bar{X}$ (ind N≈121) (org N=8)	Non-parti-cipating $\bar{X}$ (ind N≈106) (org N=8)	t_{ind}	t_{org}
Client Relations				
School community relations	3.16	3.31	-2.23^{**}	
Community influence	3.52	3.64		
Community interest	3.09	3.37	-2.55^{***}	
Students	3.40	3.56	-1.85^{*}	
Internal School Relations				
Colleague relations	3.25	3.38		
Professional support	3.38	3.56		
Staff integration	3.16	3.21		
Supervisory relations	3.10	3.74	-5.44^{****}	-2.60^{**}
Administrative practices	2.50	2.74	-2.15^{**}	
Professional Climate				
Performance and development	2.89	3.37	-4.61^{****}	-3.73^{**}
Faculty voice in educational program	2.36	2.54	-1.95^{*}	
Participation in program setting	2.36	2.57	-1.92^{*}	
Responsiveness to faculty	2.39	2.53		
Facilities				
Materials and equipment	3.10	3.31	-2.10^{**}	
Building and facilities	2.65	2.64		
Work Load				
Professional work load	2.88	2.94		
Non-professional work load	3.44	3.28		
School Performance				
Educational effectiveness	3.10	3.33	-2.56^{***}	
Evaluation of students	2.96	3.01		
Cognitive evaluation	2.85	2.68		
Student placement	3.06	3.32	-2.70^{***}	

Table 4.1a (continued)

	Partici- pating $\bar{X}$ (ind N≈121) (org N=8)	Non-parti- cipating $\bar{X}$ (ind N≈106) (org N=8)	t_{ind}	t_{org}
School Performance (continued)				
Special services	2.80	3.00	-2.04**	
Services for special children	2.88	3.06		
Services for student and staff improvement	2.71	2.86		

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*Significant at .05 level or less, one-tailed.

**Significant at .025 level or less, one-tailed.

***Significant at .005 level or less, one-tailed.

****Significant at .0005 level or less, one-tailed.

[1] The individual N varied on each scale due to missing data conventions. Long scales, especially Special Services, had more chances of at least one item being omitted or marked "not applicable" by respondents. The individual N reported here and in all subsequent tables is the middle of the range.

Table 4.1b

Evaluation Survey Data: Comparisons of Participating and Non-participating Elementary Schools before the Intervention (Individual[1] and Organizational Levels)

	Partici-pating $\bar{X}$ (ind N≃123) (org N=8)	Non-parti-cipating $\bar{X}$ (ind N≃89) (org N=8)	t_{ind}	t_{org}
Environment				
Environmental influence on policy and programs				
Students	2.38	2.54		
Teachers	3.26	3.44		
Principals	4.04	4.12		
Central office	4.34	4.19		
Board of education	4.44	4.23	$+1.70^{*}$	
Parents	3.08	2.94		
The AFT and affiliates	3.14	2.91		
State government	3.15	3.06		
Federal government	3.06	3.08		
Community agencies (police, fire, etc.)	2.32	2.13	$+1.82^{*}$	$+1.82^{*}$
Organization Structure				
Standardization	4.17	4.17		
Autonomy	4.16	4.20		
Variety	4.02	4.26	-1.87^{*}	-2.04^{*}
Hierarchy of authority	3.45	3.02	$+3.65^{****}$	
Organizational Process				
Problem-solving process				
Evaluation	3.10	3.60	-3.33^{***}	
Solution generation	3.19	3.69	-3.94^{****}	-2.28^{**}
Internal diffusion	2.51	2.80	-2.34^{**}	-2.11^{*}
Legitimation	2.50	2.72	-1.73^{*}	
Adoption	2.79	3.27	-4.06^{****}	-2.46^{**}
Implementation	3.20	3.59	-3.07^{***}	
Routinization	3.22	3.69	-4.46^{****}	-2.45^{**}

Table 4.1b (continued)

	Partici-pating $\bar{X}$ (ind $N\approx123$) (org $N=8$)	Non-parti-cipating $\bar{X}$ (ind $N\approx89$) (org $N=8$)	t_{ind}	t_{org}
Organizational Process (continued)				
Participation in decision making				
Actual participation in policy decisions	1.52	1.65		
Should participate in policy decisions	3.04	3.03		
Actual participation in operational decisions	3.39	3.49		
Should participate in operational decisions	4.29	4.28		
Resource Allocation				
Amount of attention and resources				
1. Develop highly qualified staff	3.36	3.61	-1.88^{*}	
2. Implement comprehensive and integrated instructional program	3.33	3.47		
3. To provide positive and supportive school environment	3.42	3.69	-2.12^{**}	
4. To provide ongoing evaluation of school programs for modification and development	2.88	3.11	-1.68^{*}	
5. To experiment with educational innovations	3.09	3.31	-1.72^{*}	
6. To be responsive to community	3.04	3.43	-3.21^{***}	-2.30^{**}
7. To communicate to public objectives and results of school programs	2.72	3.17	-3.30^{***}	
8. To promote educational achievement of minority students	3.27	3.51		
9. To coordinate school activities with relevant community groups	2.73	2.90		
10. To lessen disciplinary problems	3.37	3.42		
Organizational Effectiveness				
Goal effectiveness				
1. Develop highly qualified staff	3.29	3.56	-2.02^{**}	
2. Implement comprehensive and integrated instructional program	3.16	3.37	-1.67^{*}	

Table 4.1b (continued)

	Partici-pating $\bar{X}$ (ind N≃123) (org N 8)	Non-parti-cipating $\bar{X}$ (ind N≃89) (org N=8)	t_{ind}	t_{org}
Organizational Effectiveness (continued)				
3. To provide positive and supportive school environment	3.28	3.51	-1.99**	
4. To provide ongoing evaluation of school programs for modification and development	2.76	3.04	-2.05**	
5. To experiment with educational innovations	2.96	3.13		
6. To be responsive to community	2.87	3.20	-2.65***	
7. To communicate to public objectives and results of school programs	2.69	3.04	-2.64***	
8. To promote educational achievement of minority students	2.90	3.25	-2.50**	-1.87*
9. To coordinate school activities with relevant community groups	2.81	2.86		
10. To lessen disciplinary problems	3.05	2.98		
Integration				
Role behavior				
Role overload	3.07	3.16		
Role ambiguity	2.45	2.28	+2.14**	
Job satisfaction				
Intrinsic satisfaction	4.50	4.76	-2.38**	
Contextual satisfaction	4.10	4.41	-2.39**	
Cohesiveness	4.56	4.85	-2.37**	

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[*] Significant at .05 level or less, one-tailed.

[**] Significant at .025 level or less, one-tailed.

[***] Significant at .005 level or less, one-tailed.

[****] Significant at .0005 level or less, one-tailed.

[1] The individual N varied on each scale due to missing data conventions. Long scales had more chances of at least one item being omitted or marked "not applicable" by respondents. The individual N reported here and on all subsequent tables is the middle of the range. The mean N is higher than the N reported.

program, we in general expect the biases which show up between groups to reflect the qualities of the program and its purposes. The following hypotheses were developed to reflect the qualities and purposes of the OD program in which participating schools or faculty members must have been relatively more deficient if their decision to participate was guided by a need to make up those deficiencies.

Structure. The hypotheses for the perceived structure of participating vs. non-participating schools are as follows. (Numbering of the hypotheses corresponds to that used in Chapter Three.)

> H1: Personnel in schools which opt to participate will, in general, exhibit perceptions of higher levels of hierarchy and lower levels of autonomy than personnel in non-participating schools.
>
> H2: Personnel in participating and non-participating schools will, in general, not differ in their perceptions of the structural dimensions of standardization and task variety.

The summary results for these hypotheses are presented in Table 4.2.

Autonomy and Hierarchy of Authority both show the hypothesized patterns of difference but only Hierarchy of Authority gives any indication of this difference being significant. At the organization level of comparison, neither achieves significance. Strictly speaking, the null hypothesis cannot be rejected and, therefore, H1 cannot be accepted. Obviously, however, the individual level test does uncover a rather definitive difference between the two groups of respondents in their general perceptions of hierarchy of authority.

As hypothesized, there was no significant difference between the two groups in either Standardization or Variety. H2 is not shown to be false.

In general, there is no firm evidence that the two groups of schools differ significantly in their structures as perceived, on the average, by

Table 4.2

Differences in Perceived Organization Structure
Participating vs. Non-participating Samples, Pre-test

Structure Scales	Sign of Difference	Significance of t-tests Individual	 Organizational
Standardization	=		
Autonomy	-		
Variety	-		
Hierarchy of authority	+	**	

= Means are equal.

- Participating means smaller than non-participating means.

+ Participating means larger than non-participating means.

$^{*}p < .05$, one-tailed.

$^{**}p < .025$, one-tailed.

school faculties. However, when perceptions of individuals comprising the two groups are compared, faculty members of participating schools definitely perceived there to be more hierarchy of authority in their schools.

Problem-solving process. The hypothesis regarding the differences between the two groups in the perceived presence of the various stages of group problem solving is:

> H3: Personnel in participating schools will, in general, perceive their school to exhibit less group problem-solving behavior in the following stages of the group problem-solving process: evaluation, solution generation, internal diffusion, legitimation, adoption, implementation, and routinization.

The summary results for this hypothesis are presented in Table 4.3.

These results offer strong evidence in favor of the hypothesis. All differences are in the predicted direction; all individual level comparisons achieve significance; and the majority of school level comparisons are also significantly different.

Although individual school personnel tended to perceive participating schools as deficient in all the stages, those differences strong enough to also show up at the organization level are of particular interest. Those areas which significantly differentiated the participating schools from the others are what we might call the "forgotten" or "overlooked" areas of group problem solving, or perhaps even problem solving in general. In those schools opting to participate, the average faculty perceptions were not significantly different from the other schools in terms of (1) how much faculty were involved in identifying problem areas (perhaps faculty meetings tend to provide a natural mechanism for this in all schools); (2) how difficult or easy it is to get changes legitimated (especially at the district level); and (3) the degree to which faculties become involved in the

Table 4.3

Differences in Perceptions of Problem-solving Process:
Participating vs. Non-participating Samples, Pre-test

Scales for Problem-solving Stage	Sign of Difference	Significance of t-tests	
		Individual	Organizational
Evaluation	-	**	
Solution generation	-	**	**
Internal diffusion	-	**	*
Legitimation	-	*	
Adoption	-	**	**
Implementation	-	**	
Routinization	-	**	**

- Participating means smaller than non-participating means.

*p <.05, one-tailed.
**p <.025, one-tailed.

implementation of decisions. Thus evaluation, legitimation, and implementation are activities which all the schools tended to do to relatively the same degree, perhaps because they are the most salient things which are done when problems are dealt with. The areas which significantly discriminate between groups of schools are those which demand specific, conscious attention if they are to be adequately performed. In participating schools, these stages appear to have been more often overlooked or forgotten in the process of solving school problems. The similarly low legitimation scores in both groups of schools probably reflects perceived difficulty in getting changes approved by the district office.

It should be pointed out that the pre-test evaluation questionnaire contained scales of these stages which contained many more items, which were dropped from the post-test (post-intervention) questionnaire. Those longer scales significantly differentiated between groups on all problem-solving scales. Therefore, it is also the case that the present evaluation, legitimation and implementation scales are less discriminating purely for methodological reasons. Mohrman et al. (1975) report the earlier findings.

Participation in decision making. The two groups were predicted to differ in the degree to which faculties perceived themselves to participate in decision making in the following way:

> H4: Prior to the intervention, personnel in participating schools will perceive themselves as participating in decisions less than personnel in non-participating schools.

Table 4.4 provides the summary results for the test of this hypotheses.

The results reveal no significant differences between the participating and non-participating samples. When these results are compared with the test of H3, it becomes apparent that the important discrimination among these schools is not how much the personnel participate but rather the quality of the process in which they participate.

Table 4.4

Differences in Perceptions of Participation in Decision Making: Participating vs. Non-participating Samples, Pre-test

Participation Scales	Sign of Difference	Significance of t-tests	
		Individual	Organizational
Actual participation in policy decisons	-		
Should participate in policy decisions	+		
Actual participation in operational decisions	-		
Should participate in operational decisions	+(-)		

- Participating means smaller than non-participating means, individual level.

+ Participating means larger than non-participating means, individual level.

(-) Denotes direction of difference in means figured at the school level.

The reader may also be wondering about a third type of participation in the decison-making variable: namely, the degree to which perceived actual participation falls short of the ideal degree to which one should participate. We can call this decisional "deprivation" and it is legitimate to expect that perceived deprivation may discriminate between groups when actual and ideal participation may not. In fact, deprivation also fails to significantly discriminate between participating and non-participating schools.

As can be seen from Table 4.4, the last scale is the exception to our earlier claim that means figured on individual and school bases tended to follow similar patterns of differences. But it is not surprising that this should occur. The differences between group means are so slight in this case that weighting differences and missing value conventions reversed the relative position of the means without significantly affecting the fact that they are, for all practical purposes, equal.

Goal achievement. The hypothesis is as follows:

H5: Prior to the intervention, personnel in the school planning to participate will, in general, see their schools as being less able to achieve school goals than personnel in non-participating schools.

Table 4.5 presents the summary results pertaining to this hypothesis.

All differences except one were in the hypothesized direction. Only one was significant at the school level of analysis, but the majority differentiated between the pools of individuals. Certainly these perceptual differences of individuals could have been significant in the decision to participate even if differences were not significant when aggregated. However, the hypothesis is not, strictly speaking, supported.

Integration. The hypothesis which predicts the pre-test differences between schools in terms of the degree to which individuals feel that their

Table 4.5

Differences in Perceived Effectiveness in Goal Achievement: Participating vs. Non-participating Samples, Pre-test

Goal Effectiveness Items	Sign of Difference	Significance of t-tests	
		Individual	Organizational
Develop highly qualified staff	-	**	
Implement comprehensive integrated program	-	*	
Provide positive and supportive school environment	-	**	
Ongoing evaluation of school programs	-	**	
Experiment with educational innovations	-		
Be responsive to community	-	**	
Communicate school objectives and results to public	-	**	
Promote educational achievement of minority students	-	**	*
Coordinate school activities with community groups	-		
Lessen disciplinary problems	+		

- Participating means smaller than non-participating means.

+ Participating means larger than non-participating means.

*p <.05, one-tailed.

**p <.025, one-tailed.

own needs and abilities are integrated with their jobs and roles as defined by the organizations is as follows:

> H6: Prior to the intervention, personnel in participating schools will feel less well integrated with the school organization than personnel in non-participating schools. Specifically, participating school personnel will experience: less job satisfaction, more role ambiguity, and more role overload.

Table 4.6 contains the summary results for tests of this hypothesis. In addition, the results for a related group level concept, Cohesiveness, are presented.

The direction of all differences is as predicted. The differences are, in general, significant at the individual level. The difference does not achieve significance at any level for Role Overload, however. None of the differences in means are significant when schools are used as the units of analysis. Thus, there is no difference between groups of schools and the hypothesis is not upheld at that level of analysis. However, these scales (except for Cohesiveness) are the only ones which unambiguously measure individual level constructs. There are most assuredly differences between groups of individuals using these measures. At this level of analysis, the null hypothesis must be rejected.

School Survey scales (favorability of perceptions of school functioning). By and large, all the scales from the evaluation instrument are assumed to measure organizational and individual characteristics and not evaluate them. The items on the School Survey, however, usually contain a definite evaluative component. On the basis of the evaluative stances implied by the response options, we interpret survey responses to reflect favorably or unfavorably upon the school or district in terms of the item's referent. Since we felt that schools opting to participate probably were doing so

Table 4.6

Differences in Degrees of Individual-Organization Integration: Participating vs. Non-participating Samples, Pre-test

Integration Scales	Sign of Difference	Significance of t-tests: Individual	Significance of t-tests: Organizational
Role overload	-		
Role ambiguity	+	**	
Intrinsic job satisfaction	-	**	
Contextual job satisfaction	-	**	
Cohesiveness	-	**	

- Participating means smaller than non-participating means.

+ Participating means larger than non-participating means.

*p <.05, one-tailed.

**p <.025, one-tailed.

Table 4.7

Differences in Favorability of Perceptions of School: Participating vs. Non-participating Samples, Pre-test

School Survey Scales	Sign of Difference	Significance of t-tests: Individual	Significance of t-tests: Organizational
School community relations	-	**	
Community influence	-		
Community interest	-	**	
Students	-	*	
Colleague relations	-		
Professional support	-		
Staff integration	-		
Supervisory relations	-	**	**
Administrative practices	-	**	
Performance and development	-	**	**
Faculty voice in educational program	-	*	
Participation in program setting	-	*	
Responsiveness to faculty	-		
Materials and equipment	-	**	
Building and facilities	+		
Professional Work Load (quality of meetings)	-		
Non-professional Work Load	+		
Educational effectiveness	-	**	
Evaluation of students	-		
Cognitive evaluation	+		
Student placement	-	**	
Special services	-	**	
Services for special children	-		
Services for student and staff improvement	-		

- Participating means less favorable than non-participating means.

+ Participating means more favorable than non-participating means.

$^{*}p < .05$, one-tailed.

$^{**}p < .025$, one-tailed.

because of some need or deficiency in the quality of the school's functioning, we stated the following hypothesis:

> H7: Initially, participating school personnel will, in general, tend to perceive their schools less favorably than non-participating school personnel perceive their schools. This will tend to hold true for all areas of functioning.

This is a very broad hypothesis which we test using data from the entire School Survey, which deals with a broad range of school characteristics. All survey scales are predicted to show the hypothesized pattern. Table 4.7 reports the data pertinent to this hypothesis. Both scales and subscales are reported.

Only two out of fourteen scales and one subscale show differences contrary to the hypothesis. Many of these differences are significant at the individual level of analysis, but only two retain significance when the unit of analysis is shifted to schools. On the basis of these findings, one has a strong tendency to reject the null hypothesis even if it is not completely legitimate to do so. The two full scales which are contrary to the hypothesis are not really anomalies. Our observations confirm that the participating schools did indeed tend to have slightly better buildings and facilities than the others. Furthermore, the quality of facilities has only minimal connection with the social organization which is the central focus in the OD program. The Non-professional Work Load results are corroborated by the results regarding Role Overload which were reported earlier.

Resource allocation. The hypothesis is as follows:

> H8: Prior to the intervention, school personnel in participating schools will perceive less resources and attention being directed toward important school goals than will non-participating school personnel.

Table 4.8 reports the questionnaire results addressing this hypothesis.

Table 4.8

Differences in Attention and Resources toward Goals:
Participating vs. Non-participating Samples, Pre-test

Goals	Sign of Difference	Significance of t-tests	
		Individual	Organizational
Develop highly qualified staff	-	*	
Implement comprehensive integrated program	-		
Provide positive and supportive school environment	-	**	
Ongoing evaluation of school programs	-	*	
Experiment with educational innovations	-	*	
Be responsive to community	-	**	**
Communicate school objectives and results to public	-	**	
Promote educational achievement of minority students	-		
Coordinate school activities with community groups	-		
Lessen disciplinary problems	-		

- Participating means smaller than non-participating means.

+ Participating means larger than non-participating means.

* p <.05, one-tailed.
** p <.025, one-tailed.

The pattern of results regarding this hypothesis is very similar to that for H7. All differences are in the hypothesized direction. The majority of individual level t-tests are significant. Minimal confirmation is encountered at the organization level of analysis. We have a strong urge but no license to reject the null hypothesis.

Influence. Questionnaire items tapped influence from both internal and external groups on educational policy and programs. Our hypothesis considered the influence of groups both internal and external to the schools.

> H9: Prior to the intervention, participating school personnel will perceive the influence of environmental elements to be greater than will non-participating school personnel. The influence of internal school personnel, i.e., teachers and principals, will be perceived as less in participating schools than in non-participating schools.

Table 4.9 reports the results pertinent to this hypothesis.

While the directions of the differences, in general, conform to the hypothesis, very few achieve significance of any type. The hypothesis must be rejected. Perceived influence does not significantly differentiate between participating and non-participating groups.

The one item which is an exception to the general finding is the perceived influence of community agencies (e.g., police, park district, city government, etc.). The reason this item discriminates in unclear, but it should be pointed out that the only item depicting resource allocation which reached significance at the organization level of analysis in Table 4.8 was the goal to "be responsive to community," which participating school personnel generally perceived to receive less emphasis and resources than did non-participating faculties. Evidently, there does seem to be a rather salient difference between participating and non-participating school communities, or

Table 4.9

Differences in Perceived Influence on Policy due to Various Environmental Entities: Participating vs. Non-participating Samples, Pre-test

		Significance of t-tests	
Influential Entities	Sign of Difference	Individual	Organizational
Students	-		
Teachers	-		
Principals	-		
Central office	+		
Board of education	+	*	
Parents	+		
Teacher union (AFT) and affiliates	+		
State government	+		
Federal government	-		
Community agencies	+	*	*

- Participating means smaller than non-participating means.

+ Participating means larger than non-participating means.

* $p < .05$, two-tailed.

at least their perceived relationships with those communities. The character of those relationships is unclear from the questionnaire results.

Summary of hypothesis tests. In general then, few of the hypotheses have been upheld at the school level of analysis. What has been consistent across hypotheses is that the patterns predicted have almost invariably appeared. We have taken a rather conservative stance toward confirming our hypotheses. One could legitimately, and more liberally, interpret our hypotheses to be more global in intent so that a test of the hypothesis would depend upon the patterns of results over pertinent scales and items. In our discussion we have interpreted our hypotheses as implying a series of sub-hypotheses, one for each pertinent scale or item, each of which must achieve significance before the overall hypothesis is accepted. The more global approach might be tested by using a sign test (e.g., Kerlinger, 1964). Without actually applying statistical tests on the patterns, it is clear from our cumulative results that participating schools are consistently different from non-participating schools.

The other manner in which we have been conservative is in our use of the organization level t-tests. If we rely entirely on individual level tests, many of our hypotheses are confirmed. There are good reasons why this might be a substantively, if not statistically, legitimate approach. Specifically, all the measures mentioned in these hypotheses are based on perceptions of individuals. While these perceptions when statistically aggregated to school means do not seem to reveal significant differences between samples, we must keep in mind that the processes by which perceptions of individuals are socially aggregated to some overall "group" or "organizational" perception which seems to underly "group" or "organizational" behaviors are not simply averaging processes. Even one person who has different perceptions can influence the social processes in a significant way, although the statistical impact of those perceptions on the sample mean may be minimal and insignificant.

The perceptions measured by our various surveys and used in our tests of the hypotheses are potential inputs into at least two social processes. First, there is the process by which each school decided whether or not to participate. Certainly, statistically insignificant differences in perceptions could have had highly significant impact on the final decision. Second, the OD program itself involves a social process which unfolds over two years following the decision to participate. We can expect that slight statistical differences in perceptions can have a cumulative or synergistic effect over that time which, in reality, significantly affects the characteristics of that process and its outcomes.

On the basis of the above arguments, based on consistent patterns of results and actual vs. statistical significance, we feel compelled to consider our two groups of schools, participating and non-participating, to be different from one another. It would be foolhardy to overly rely on conservative tests of hypotheses and assume in all our subsequent discussions that these schools are not significantly different and therefore comparable. All comparisons between participating and non-participating schools in evaluating the OD program must, therefore, be treated with circumspection.

Alternative Interpretations of Perceptual Results

The rationale behind the hypotheses just presented stemmed from the assumption that the entry process had educated all school faculties in the rudiments of the OD program design. Thus, any differences in self-selected groupings of schools reflected, we assumed, decision processes on the part of each faculty which took into account the nature of the OD program and its purposes and the characteristics of their school and its functions as made salient by the design of the OD program.

The most valid way of collecting the questionnaire data to test these hypotheses would be to administer questionnaires prior to any entry process whatsoever so that respondents are not sensitized to the concepts being measured. This was simply not feasible in our particular case. The political, organizational and interorganizational realities of our situation, as we have described earlier, constrained us to administering our questionnaires after the entry process had been completed. That is, respondents filling out questionnaires knew whether or not their school would be participating. (Indeed, some respondents in non-participating schools--despite our continual efforts to create contrary expectations--thought that their non-participating status would exempt them from all aspects of the study, including the completion of questionnaires. Needless to say, these people reacted somewhat negatively to our questionnaires.)

The simple fact that respondents knew whether or not they were participating allows all the previously reported comparative findings to be explained by an alternative, competing rationale. The competing rationale for each hypothesis starts with the fact that respondents already knew their status and this knowledge in turn determined their response tendencies. Any number of psychological theories such as cognitive dissonance theories, attributional theories, theories of cognitive balance, etc. could be invoked here to explain why the questionnaire results differed as they did. Simply put, one could argue that respondents answered the questions in a way that was consistent with their decision to participate or not to participate, which made that decision a rational or reasonable one.

An alternative interpretation might start with the assumption that the respondents had expectations about the use to which the data they were generating would be put. Thus, respondents from non-participating schools may (despite our efforts to the contrary) still be somewhat apprehensive that the responses from their school will be used in an evaluative way by district school personnel, thus creating a tendency for them to inflate their responses somewhat. At the same time, respondents from participating schools may well be anticipating the use to which they will put the data themselves. To the extent that they are motivated by a desire to "improve" (from their point of view) their school's functioning, they may be overly "objective" in their evaluations, thus tending to deflate their school's actual state of functioning.

Both types of alternative explanations just offered argue in terms of individual processes. These types of rationale would thus seem to legitimate our earlier use of individual level t-tests to help assess differences between the groups.

Finally, we must consider the extent to which these alternative explanations of group differences raise doubts about the meaningfulness and validity of measurements of subsequent summative results of the OD program to be reported in Chapter Six. For us, the threat that these interpretations of questionnaire responses will invalidate our results is great. We adopt a social constructionist or social definitionist point of view (Ritzer, 1975) in this regard in that we assume that the social processes in which school faculties engaged for the duration of the intervention stemmed from the initial phenomenological states and world views of the participants. The results of our intervention, both summative and formative in nature, are therefore partially explained and predicted by the perceptions of school faculty members as measured by the pre-test questionnaires. The extent to which these questionnaire results reflect actual organizational states of functioning and/or the expectations and rationalizations of the respondents depending on the known participation status of their school is moot. We cannot, as yet, determine the real mix of these two forces which explains the data. What we do feel, however, is that the questionnaire results are a relatively valid indication of the perceptions of organizational members at the time of the pre-test. It should also be mentioned at this point that the post-test questionnaire results are similarly attributable to a number of possible explanations, ranging from actual program effects of the intervention on organization functioning to conscious or unconscious self-fulfillments of prophecy by respondents.

With all the ambiguity about interpretation of questionnaire responses which has been stirred up in this section, perhaps the reader will welcome (and perhaps our analysis can profit from) some comparisons using relatively "hard," "objective" and (most importantly) unobtrusive data.

Group Differences on Demographic Measures

The data discussed up to this point in this chapter have been the result of perceptual questionnaire measures. Questionnaires, interviews, and observations were our only methods for gathering data regarding the functioning of schools. All these methods are open to various charges of inherently biasing the data through their obtrusiveness and the fact that they are filtered by perceptions and are not directly based on concrete data. Questionnaires have been used extensively by us and others because they yield the most systematic, quantifiable, and manipulable data. Once collected, questionnaire data are least susceptible to further perceptual filtering by us.

Although we have no other data on pre-intervention school functioning which we can use to compare participating and non-participating schools, we do have some relatively concrete data regarding various demographic facts about the schools. When the two groups are compared on these data, we can get a fuller picture of the nature of the school's situation and the makeup of the school's personnel. It is possible, then, to infer from this type of data some general sense of the social context in which school functioning takes place.

The basic question is, how do the two self-selected groups of elementary schools tend to differ in their demographic contexts? Table 4.10 presents the group averages on several demographic variables based on archival data.

As can be seen, many of the group means are quite different. In general, participating schools tended to be smaller, to have a higher percentage of faculty with membership in the NEA and its local affiliate (despite the fact that the AFT local was the official bargaining agent), to have a smaller percentage of minority students, and to have fourth and sixth graders with higher average composite scores on the Iowa Test of Basic Skills. These data certainly indicate that schools choosing to participate had characteristics differentiating them from the others. The size and student characteristics indicate that the participating schools may have, in some senses, more manageable situations in general.

Demographic data were also collected on pre-test questionnaires. These data run the risk of not being representative since, typically, fewer teachers answered the questionnaire than worked full-time in the school. Questionnaire demographics also included NEA and AFT membership, and therefore we can match the survey data concerning association and federation memberships with those obtained from archival data regarding such memberships to get an estimate

Table 4.10

Comparisons between School Groups on Archival Demographic Data, Pre-test

Type of Data	Group Means Participating (N=8)	 Non-participating (N=9)
Size		
Number of full-time faculty	20.25	23.78
Student enrollment	415	473
Faculty characteristics		
Percent with NEA membership	45.5%	38.6%
Percent with AFT membership	33.9%	37.0%
Student characteristics		
Percent minority*	23.2%	45.3%
Average composite achievement scores**	+.07	-.306

---

*Includes black, Spanish-American, etc.

**Scores are averaged from composites on the Iowa Test of Basic Skills of fourth and sixth grade students. The values are deviations from grade level equivalents normal for students at the point of the school year in which tests were given. For example, if tests were taken in the second month of the school year by fourth graders, then the norm for that group at that time is expressed as a grade level equivalent of 4.2 years. Students scoring equivalent to the norm for beginning fifth graders (i.e., 5.0) are scored by the district as +.8. The values reported are averages of this type of deviation score.

of how representative the questionnaire sample is of the entire sample, at least with regard to membership in teacher organizations. Table 4.11 does this.

From the comparisons in the table, it appears that the two sources of data yield quite similar results. The major deviation (four percent) is for percent NEA membership in non-participating schools. On the basis of these results, we can be somewhat assured that other demographic data collected by questionnaires are representative of the entire sample. Furthermore, no strong patterns differentiated the participating and non-participating groups with regard to organization membership.

Table 4.12 reports the comparisons between the groups of faculties on other demographic characteristics collected by questionnaires. These data reveal that the teachers in participating schools who answered the questionnaires were, on the average, older than teachers in non-participating schools. This age difference is also reflected in the average total years of teaching.

Conclusion

In summary, the demographic data as well as the perceptual data available to us seem to indicate quite strongly that the two groups of schools have different attributes, on the average. But one of our interests in the intervention and in this report is to evaluate the manner in which the OD program interacts with and is implemented by different host organizations. This kind of issue can only be confronted if the schools which implement the program are varied enough in their own characteristics to allow for comparisons among them and their particular implementation processes. One question is, have the adoption decisions by the district's schools in effect divided them into two internally homogeneous samples so that the participating sample does

Table 4.11

Comparison between NEA and AFT Membership Patterns
Using Archival and Questionnaire Measures

	Group Means			
	Participating (N=8)		Non-participating (N=8)	
Membership	Archival	Survey	Archival	Survey
Percent NEA	45.5%	44.9%	42.0%[1]	46.0%
Percent AFT	33.9	34.9	36.3[1]	37.8

---

[1] Values differ from those in Table 4.10 due to the omission of the one school also omitted from questionnaire results because of its low response rate.

Table 4.12

Comparisons of Faculty Characteristics Questionnaire Demographics: Participating vs. Non-participating Samples, Pre-test

	Group Means	
Faculty Characteristics	Participating (N=8)	Non-participating (N=8)[1]
Age	40.5**	35.3
Year of education	17.3	17.1
Years in present position	7.0	5.7
Total years in teaching	12.4*	9.8

** t-test $p < .001$, two-tailed.

* t-test $p < .05$, two-tailed.

[1] As in the other questionnaire data, one school has been omitted because of its low response rate.

not show variation in pertinent variables? The next section presents demographic data to begin to answer this question. Chapters Seven and Eight bring data of other kinds to bear on this question.

Another question which is raised by the biased splitting of the district's schools into two groups is concerned with its methodological implications for evaluation. Specifically, if the self-selection process has split the district into a high and low group then we might expect, as a statistical artifact, that over time both groups would regress in their characteristics toward the overall sample mean. This regression effect could be misinterpreted as an effect of our intervention, especially since the various evaluative scales of the questionnaire reveal that participating schools are starting out at a lower point than those not participating. Regression toward the district mean, therefore, would mean improvement for participating schools of precisely the type already expected to be caused by participation in the OD program. However, Cook and Campbell (1977) do make the point that the regression artifact is less of a threat to validity if one can reasonably substantiate that the schools in the samples have been fairly consistent in their attributes historically, so that their placement in relation to one another is less due to a transitory phenomenon and more indicative of the status quo. Our observations and various other data about the schools of the district indicate that relative school placement or ranking on almost all of the variables measured had been quite consistent over the years prior to the intervention. Indeed, the demographic data just shown cannot be expected to have changed much, if at all, over the years immediately before and during the intervention. Therefore, using Cook and Campbell's reasoning, we feel that our summative results are less threatened by the regression artifact.

Variation within the Participating Sample

In Chapters Seven and Eight, the reader will be given a very thorough description of the differences which existed among participating schools both prior to and during the implementation of the OD program. The purpose of the present section is merely to acquaint the reader with the variation of demographic characteristics within the participating sample. Table 4.13 presents these data for the eight elementary schools and the high school in this sample.

In a nutshell, the schools within the participating sample vary quite widely (relative to the range in the district as a whole) on almost all of the demographic variables. For the elementary schools, size varies from the smallest (School C) to the third largest (School D) of the district's 17 elementary schools.

The eleventh row reports the school rankings on Average Iowa Test Composites among all 17 elementary schools. As was seen in Table 4.10, participating schools were, as a group, higher than the average of the non-participating schools on their Iowa test scores. Nevertheless, five of the eight participating schools were ranked in the lower half of the district's schools on that variable.

The sample shows varying mixes of NEA and AFT memberships. The latter was often reflected by observable militancy in the faculties.

Finally, the percent of minority enrollment shows a wide variation which is generally indicative of student socio-economic backgrounds. The variation in minority enrollment is comparable to other district schools except for three non-participating schools which have over 90 percent minority enrollment. School A is the fourth highest in percent of minority enrollment.

Table 4.13

Demographic Data for Participating Schools, 1974-75 School Year

Variable	Participating Schools								High School
	A	B	C	D	E	F	G	H	
Size									
Number of teachers	21	18	14	29	18	24	22	16	≈100[1]
Number of students	341	415	358	507	361	522	525	290	2300
Faculty characteristics									
Age	39.6	38.6	40.0	41.0	42.0	42.4	38.4	41.0	37.2
Years of education	17.2	17.0	17.1	17.7	17.1	17.9	17.4	16.6	17.9
Years in present school	6.1	7.8	6.9	6.6	9.7	6.4	5.1	8.4	7.1
Total years teaching	11.6	12.1	11.5	10.3	18.3	12.5	11.4	13.9	11.6
Percent NEA members	33	72	36	28	50	67	59[2]	19	≈17[1]
Percent AFT members	29	5	0	59	28	13	68[2]	69	≈60[1]
Student characteristics									
Percent minority	50.7	25.8	1.4	21.0	6.0	9.0	34.0	37.8	26.9
Iowa Test Average Composites[3]	-.4	+.2	+.65	-.1	+.7	-.15	-.2	-.15	N.A.
Rank (of 17) on Iowa test[4]	14	6	2	9	1	10	12	10	N.A.

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[1] The high school had 88 full-time faculty but many other part-time faculty and full-time support people (e.g., counselors) who actively participated. Depending on one's criterion, faculty size ranges from 88 to 136. Thus, size and percent memberships are only estimates.

[2] Several teachers in School G belonged to both the NEA and the AFT; thus the total is more than 100 percent.

[3] Scores are averaged from composites on the Iowa Test of Basic Skills of fourth and sixth grade students. The values are deviations from grade level equivalents normal for students at the point of the school year in which tests were given. For example, if tests were taken in the second month of the school year by fourth graders, then the norm for that group at that time is expressed as a grade level equivalent of 4.2 years. Students scoring equivalent to the norm for beginning fifth graders (i.e., 5.0) are scored by the district as +.8. The values reported are averages of this type of deviation score.

[4] The ranking on average Iowa test scores by students for all 17 elementary schools.

Schools in our sample really did span a wide variation in the characteristics of their immediate community environment; from semi-suburban, relatively recently developed communities (e.g., Schools C, D and F) to older, urban communities (e.g., Schools B and G); from established and stable neighborhoods (e.g., School E) to neighborhoods with a highly transient student body (e.g., School A).

As will be reported in Chapters Seven and Eight, the same wide variation among the demographic characteristics of these schools is apparent in the questionnaire measures. It is not at all the case that participating schools represent one relatively homogeneous sector of the district's schools. An earlier paper explored this variation (Mohrman, Cocke & Duncan, 1975). In that paper, a general conclusion was drawn that the participating sample seemed to be made up of at least two kinds of schools: (1) schools which were perceived to be relatively healthy (at or above the district's means on the various School Survey categories) and which appeared to be motivated by a "professional" view of the faculty's role as educators and (2) schools which were perceived very unfavorably by their faculties on the survey scales and which seemed to be motivated by the desire to do something (perhaps anything) to improve the situation at their school.

Ranking the participating schools in terms of overall favorability of faculty perceptions yielded the particular sequencing of schools which is used in Table 4.13. School A was most favorably perceived on the pre-test survey, while School H was the least favorably perceived by its faculty. The earlier paper (Mohrman et al., 1975) goes into considerable detail about the ranking process and is appended to this report (Appendix I). The letter designations of participating schools which were used in that paper are continued in the present report and, in fact, in all other papers and publications regarding this project (many of which are appended). This, therefore, increases the ease of cross-referencing among these documents.

Having described the setting created by a combination of our entry activities and the characteristics of the district and its schools, and having described the nature of the OD program, we now move in the remaining chapters to an extended description and evaluation of the implementation of that program in that setting.

CHAPTER FIVE

PROGRAM INITIATION: TRAINING AND SOME INTERIM EVALUATION

Introduction

The previous chapters have dealt mainly with describing the setting and context in which the OD program took place. In the present chapter, we describe in detail the activities we went through in starting up the implementation of the program in the participating schools. The chapter is divided into three parts: (1) a description of the training activities we conducted for program personnel from the district during the first academic year of implementation; (2) a reporting of an interim evaluation of the implementation processes which took place that first year as well as an evaluation of the initial training programs; and (3) a description of the training which took place at the beginning of the second academic year.

Subsequent chapters present, in a great deal of depth, our evaluation of the impacts which the intervention activities described in this chapter seem to have caused. In a sense, then, this chapter describes (1) our experimental manipulation (i.e., training), (2) an interim check on the efficacy, quality and adequacy of that manipulation, and (3) adjustments to it.

The First Year Training Programs

Introduction

One of the major assumptions underlying the change process made in this study is that the only way an organization can change is if the people in that system develop necessary skills, abilities, and commitment to the change process. A prime objective of this project was to develop problem-identification and problem-solving skills as well as change agent skills among members of the school system so that they were not overly dependent on outside consultants during the intervention period. It was hoped that these skills would be embedded in the system so that when the formal project ended and the research-intervention team from Northwestern left, the district would still be able to carry on the project on their own.

Training Program and Staff

During the first year of implementation and the second year of the project (1974-75), there were five different training programs for teachers, principals, and the Superintendent and his staff. These programs will be outlined in detail below. The training staff for each of the programs was:

Dr. Gerald Zaltman
Albert Wesley Frey Professor
Graduate School of Business
University of Pittsburgh[1]

Dr. Robert Duncan
Professor of Organization Behavior
Graduate School of Management
Northwestern University

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[1] At the time, Professor of Marketing, Graduate School of Management and Professor of Education, Northwestern University.

Dr. Emmit McHenry
Assistant Dean
School of Speech
Northwestern University

Allan Mohrman
School of Administrative Science
Ohio State University[1]

Susan A. Mohrman
Organization Behavior Department
Graduate School of Management
Northwestern University

The Five Training Programs

1. Training for principals from participating schools. The plan was to implement the principal component first, in order to acquaint the principals through first-hand experience with the functioning of the program. We believed that by experiencing the same training as the teacher leaders and monitors, and by going through actual feedback of the Principal Survey and problem solving as a Principal Group, the principals would come to understand and value the model and the process, and would be less threatened by the Program Group activities in their own schools.

The principal component was functionally independent of the school level Program Groups and optimally required the participation of principals in all the schools in the district. Therefore, training was scheduled for the entire group of 22 principals for two days in December 1974. The day before the training, the interim Superintendent had second thoughts about having all the principals absent from the district at one time and decided to send only the principals of the schools in which the faculty had voted to participate as a Program Group. A second training session was scheduled for the other half of the principals in January. This decision by the superintendent had the effect of dividing the principals into an "in-the-program" group and an "out-of-the program" group. As a result, the second group of principals never did fully participate in the principal problem-solving group.

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[1] At the time, a Ph.D. candidate in the Graduate School of Management and School of Education, Northwestern University.

The overall objectives in the training for the principals in the participating schools were:

1) To present the mechanics of the program to the principals so that they would fully understand it.

2) To provide training as to their specific role in the entire project at both the school level and at the district level as they participate in the Principal Group.

3) To reinforce commitment on the part of the principals (and thereby also reinforce the commitment of their respective faculties).

The outline for the two-day training was as follows:

DAY ONE TRAINING

Time	Overview	Objectives
9:00-9:30	A. What will training cover	1. To provide general introduction to the training session
	B. How does training fit with total project	2. Address any misconceptions they might have regarding the project
	C. Address principals' initial questions and concerns regarding the project	
9:30-10:30	Feedback of Principal Survey[1]	Objectives
	A. Present overall profile across all categories in questionnaire	1. To present understanding of use of data from questionnaires
	B. Present feedback on one category in detail	2. To initiate thinking about issues in system
11:00-12:00	Group Problem Solving Exercise (video tape)	Objective
	A. Participants play NASA game;[2] participants divided into two groups	1. To provide experience in individual and group problem solving

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[1] This survey was conducted in November 1974 among all 22 principals in the district.

[2] Jay Hall (1970).

12:00-1:00	Lunch and Viewing of Video Tapes of NASA Exercise	
1:00-2:00	Discussion of Group Process	Objectives
	A. How group process affects problem solving and decision making	1. Review group process as it affects decision making
	B. What to look for in groups to increase their effectiveness	2. Help them see how groups can affect problem solving and decision making
2:00-3:00	Lecturette on Problem Solving	Objective
	A. Stages of problem solving	1. To present techniques and steps for effective problem solving
	B. How to effectively problem solve	
3:00-4:00	Group Problem Solving (video tape)	Objective
	A. Principals take data from one of the categories from Principal Survey and analyze it	1. To provide experience in work with data
4:00-4:15	Summary of First Day	

DAY TWO TRAINING

9:00-9:15	Overview	Objective
	A. Introduction to second training day	1. To provide orientation to second day
	B. Answer questions from principals regarding first day	
9:15-10:15	Overview of Program	Objective
	A. Presentation of model of the program	1. To present principals with clear understanding of how program works
	B. Discuss role of different individuals and groups in the program	
	C. Detailed discussion of how program works	

10:30-11:30	Group Problem-solving Exercise (video tape)	Objective
	A. Principals do Energy International Co. simulation[1]	1. To provide more opportunity for principals to practice problem-solving skills
11:30-1:00	Lunch and View and Discuss Video Tapes	
1:00-2:00	Lecturette on Change Process	Objective
	A. Strategies for change	1. To provide understanding of techniques for implementing change
	B. Dealing with resistance to change	
	C. Identifying resources for change	
2:00-3:00	Discussion of Implementation of Program	Objective
	A. Identify with principals what they feel are roadblocks to project	1. To get principals to identify problem areas and think of ways of resolving them
	B. Identify ways of overcoming roadblocks	
	C. Set up time schedule for rest of program activities	
3:30-4:15	Wrap Up of Training	
	A. Election of Principal Group leader	
	B. Summarize training	

Issues arising in training of principals from participating schools.

The training of the principals from participating schools was interlaced with some expression of anxiety concerning the program in their own buildings. Some of the principals felt trapped between a faculty which had decided to embark on survey feedback and problem-solving activities and a district office which was at best lukewarm toward the project. They felt themselves to be in a high risk situation, with attention focused on them simply because their faculty decided to be in the program. For several principals, this was especially threatening because, as the data revealed, their schools had lots of problems. In a time of administrative turnover, uncertainty was very high and the visibility resulting from this project was potentially threatening.

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[1] J. William Pfeiffer and John Jones (Eds.), The 1972 annual handbook for group facilitators. La Jolla, Cal.: University Associates, 1972.

At the training, it was clear that the model inherent in the program was very different from the assumptions and management style of many of the principals. A primary difference was that whereas the survey feedback assumed that there was a work group to receive the data and solve problems as a group, some of the principals perceived their faculties as divided and as not having common problems. They voiced the fear that the Program Group would make more work for them, as they would constantly have to mediate between the factions in their faculty. This seemed to relate to several factors. First, several of the principals said that they maintained control in their buildings by "dividing and conquering," or by "keeping the faculty off balance." Thus, they apparently utilized and promoted differences within their faculty. Another aspect of the so-called divisiveness of teachers in the district was that the teacher collective bargaining representation was contested by locals of both the National Education Association and the American Federation of Teachers, and although the latter was the offical representative at that time, the NEA was making a full-fledged effort to regain bargaining rights at the next representation election. Thus, there was a potential division even between teachers in the same building. There was, at the district level, a general antagonistic employee-management atmosphere characteristic of situations where there is a need to be militant in order to please the constituency.

The assumption inherent in the program that teachers, as professionals performing the technical task of the organization, have the legitimate authority and necessary expertise to identify and come up with solutions for many of the problems they face was hard for several principals to accept. One principal made the straightforward claim that there was not a single decision that his faculty had the right to make and that he had a principal's handbook that proved it. As he put it, "Everybody can't be boss; and it just so happens that in my school, I am." The general management philosophy that decision making and problem solving were administrative functions was shared by at least some of the principals.

Other principals, on the other hand, appeared interested in the program and seemed to sense that it was a way to tap the interest and professional skills of their staffs. The attitude of the principal, and the extent to which he could or could not accept the organizational model implicit in this program, was an important factor in the relative success or failure of the program in his school.

The content of the principal training attempted to deal with the issues and concerns expressed by the principals. In general, they felt that the training helped them to better understand the program and how it might have the potential of providing a mechnism for them to work more cooperatively with their teachers in problem solving.

However, one of the factors that the principals expressed the most concern over was the question of how committed the interim Superintendent and his staff were to the entire OD program. The principals felt that the next step should be one of finding out what commitment existed in the Superintendent's office. They felt that the intervention team should hold a training session with the Superintendent's staff at an early stage of the program. The principals felt that unless there was a strong commitment expressed and communicated to the district, the program should be terminated. A day-long training session was then established in January 1975 for the Superintendent and his staff.

Reflecting partly a "wait and see what happens" stance and partly uncertainty as to how to establish a unified Principal Group, given the events that had transpired, the Principal Group decided not to meet until the day of the first faculty Program Group meeting in the Spring of 1975. Our hopes that the Principal Group would get started first in order to acquaint the principals with the processes of the program before their faculties began to meet was not accomplished.

There was one other problem that occurred during the principal training and this focused on the election of the leader of the Principal Group. The principals elected as their leader a man who had neither a management philosophy and style compatible with the program nor the motivation to commit the energy demanded by the position. As interventionists, we had held off on the election of the principal leader until training was almost completed, so that the demands of the position would be clear to all principals and their subsequent choice would be an informed one. The election process was by secret ballot with first, second, and third choices. There was to be no nomination process nor interpersonal campaigning. We had set the stage for sabotage. If the principals knew what type of individual was necessary to make the program work, they also knew who would assure failure. Loudly and with a cavalier dismissal of our procedural desires, another principal--whose behavior was, and continued to be, erratically ambivalent about the program--

nominated the eventual, and of course inevitable, winner of the election.

2. Training--orientation session with Superintendent and staff. The next training session was held in January 1975 at the Superintendent's office in the district. This was a one-day session. The objectives of this session were:

1) To provide an orientation for the Superintendent and his staff regarding the mechanics of the program and their particular role in it.

2) To reinforce the commitment of the Superintendent and his staff to the program.

The outline of the training was as follows:

Time	Introduction and Overview	Objective
9:00-9:30	A. Objectives of the program	1. To present overview for day
	B. Respond to questions Superintendent or staff might have	
9:30-11:00	Overview of the Program	Objective
	A. Presentation of the model of the program	1. Present clear understanding of how project works
	B. Discuss role of different individuals and groups in the program	
	C. Detailed discussion of how the program works	
11:00-11:30	Presentation of Problem-solving Material	Objective
	A. Present stages of problem solving	1. To present first hand techniques for problem solving
	B. Present steps for effective problem solving	
11:30-12:30	Lunch	
12:30-2:00	Discussion of Feedback Process	Objectives
	A. Discuss how survey feedback process works	1. To present understanding of how feedback process works

	B. Present guidelines for survey feedback	2. Present actual data for them to consider
	C. Present overview of data from Principal School Survey	
2:00-3:00	Schedule Activities for the Program	
	A. Set up dates for further training 1) Non-participating principals 2) Program leaders 3) Program monitors	
	B. Set up dates for three released time meetings	

Issues in training for Superintendent and staff. The primary issue in this training was to determine the interim Superintendent's commitment to the program. During this session, the Superintendent indicated that he was most concerned about teacher performance in the classroom and was a little reluctant to provide released time for training and Program Group meetings. After some discussion of the program and its benefits, he indicated a commitment to go ahead with the program and "see what could come of it in the district."

There was no question in our minds regarding his commitment--he was lukewarm at best yet he felt that the district had made a decision to implement the program under the previous Superintendent. Thus, the interim Superintendent would proceed with the OD program, and details and procedures for further training and Program Group meetings were resolved.

It is important to emphasize here that the interim Superintendent was placed in a difficult situation. He was a member of the prior Superintendent's staff and had been asked by the School Board to act as interim Superintendent. He had not sought this job nor did he particularly relish it. However, he approached it with great energy and dedication. Under the circumstances, it would have been very easy and understandable for him to have terminated the OD program, given the instability in the district due to the first Superintendent's leaving.

In reality, then, the interim Superintendent's decision to proceed with the OD program was based partly on his desire to see what benefits might incur from the program, but more directly from the feeling that the district had made a commitment the prior Spring and thus things should proceed.

3. Training for principals from non-participating schools. A one-day training-orientation session was held in February 1975 for the twelve principals from the schools in the experimental district that had elected not to particpate in the OD project. The objectives for this training session were two-fold:

1) To provide an overview of the program for these principals since they would still be participating with the principals from the participating schools in the Principal Problem-solving Group.

2) By increasing their understanding of the project, it was hoped that they might try at a later date to get their schools to participate in the project.

The outline of this training session was as follows:

Time	Introduction to Training	
9:00-9:15	A. Overview of day	
9:15-10:30	Overview of Program	Objective
	A. Presentation of the model of the program	1. To present clear understanding of how program works
	B. Discuss role of different individuals and groups in the program	
	C. Detailed discussion of how program works	

10:30-11:30	Group Problem-solving Exercise (video tape)	Objective
	A. Participants do NASA simulation, illustrating individual vs. group problem solving and decision making	1. To provide experience that shows how group process can effect problem solving and decision making
11:30-12:30	Lunch and View Video Tapes	
12:30-1:30	Discussion of Group Process	Objectives
	A. How group process effects problem solving and decision making	1. Review group process as it effects problem solving and decision making
	B. What to look for in groups to increase their effectiveness	2. Through doing simulation and watching their tape see the impact of group process on group effectiveness
1:30-2:30	Feedback of Principal Survey	Objectives
	A. Present overall profile series from Principal School Survey questionnaire	1. To establish understanding of use of data from questionnaire
	B. Present feedback in detail on one of the categories from the questionnaire	2. Initiate thinking about issues in the system by analyzing data from the district
2:30-3:30	Group Problem Solving	Objective
	A. Principals take data from one of categories of Principal Survey and analyze it	1. Get participants to think about some action they might take to deal with certain issues identified through questionnaire administration
3:30-4:00	Summary of Training	
	A. What we tried to accomplish	
	B. Get them to think about how they might get involved in the project even though their schools are not now in the project	

Issues from training for non-participating school principals. The major issue that came out of this training session was the concern of the principals from non-participating schools as to just what their role in the OD project would be. They felt that since their faculties had decided not to participate in the program, they also would not participate. During training, the role of the Principal Group was emphasized and it was indicated that we wanted all principals to participate in that group. However, because the training was split between participating and non-participating school principals, the non-participating school principals felt marginal and not really part of the OD program. As a result, they never really got involved.

4. Training for program leaders. There were three days of training in February at Northwestern University for the program leaders, who were the key personnel in the program. Program leaders were elected in each school by their faculties. As indicated earlier, the role of the program leader was to present the feedback to the faculty from the School Survey Questionnaire and be a group leader and facilitator in the problem-solving meetings. Given these tasks for the program leaders, the objectives for this training were as follows:

1) To present the mechanics of the program to the program leaders so they fully understood it and understood most particularly the underlying rationale for the various components of the program.

2) To provide skill training in:
    a) Conducting the feedback of the survey to their respective faculties.
    b) Being sensitive to group processes to enhance the effectiveness of their problem-solving meetings.
    c) Identifying resistance to change and reducing its negative effects.

The outline for the three-day training session was as follows:

DAY ONE TRAINING

Time	Introduction to Training	
9:00-9:30	A. Outline three days of training	
	B. Point out rationale for training components	
	C. Respond to general questions they might have regarding project	
9:30-10:45	Overview of Program	Objective
	A. Presentation of the model of the program	1. To present clear understanding of how program works and its underlying rationale
	B. Discuss role of different individuals and groups in the program	
	C. Detailed discussion of how the program works	
10:45-11:45	Group Problem-solving Exercise (video tape)	Objective
	A. Participants do NASA simulation illustrating individual vs. group problem solving and decision making	1. To provide experience that shows how group process can effect problem solving and decision making
11:45-12:45	Lunch and Viewing Video Tapes	
12:45-1:45	Discussion of Group Process	Objectives
	A. How group process affects problem solving and decision making	1. Review group process as it affects problem solving and decision making
	B. What to look for in groups in order to improve their effectiveness	2. Through doing simulation and watching video tapes see the impact of group process on group effectiveness

1:45-3:15 Group Problem-solving Exercise

A. Have participants do Hung Jury[1] simulation which focuses on reaching consensus in decision making and problem solving

Objective

1. To provide more experience

3:15-3:45 Summary of Day

Key assumption underlying first day's training is that an important aspect of the program leader's role is to be sensitive to group process. The program leader is going to lead the problem-solving meetings and thus is going to be concerned with making sure these meetings have an effective group climate that maximizes participation and commitment on the part of the teachers involved. Therefore, it is important that the program leader is able to diagnose problems that a group might have as its operates.

DAY TWO TRAINING

9:00-9:30 Introduction

A. Present overview for day

B. Deal with any questions from first day

9:30-10:30 Lecturette on Problem Identification and Problem-solving Process

A. How do you diagnose and identify organizational problems

B. Discuss stages of problem solving

C. Discuss techniques to increase problem-solving effectiveness

Objectives

1. To present techniques on how to diagnose problems so that participants can better understand factors involved

2. To present skills for problem solving

10:30-11:30 Group Problem-solving Exercise (video tape)

A. Program leaders do Energy International problem-solving simulation

Objective

1. To provide opportunity for teachers to apply skills learned in problem solving and decision making

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[1] J. William Pfeiffer and John Jones (Eds.), The 1974 annual handbook for group facilitators. La Jolla, Cal.: University Associates, 1974.

11:30-1:00	Lunch and View and Discuss Video Tapes	
1:00-3:00	Lecturette on Survey Feedback Process A. Discuss process of feedback of questionnaire survey B. Present techniques for mechanics of survey feedback process	Objective 1. To present program leaders with skills for doing survey feedback
3:00-3:30	Summary of Day's Training	

DAY THREE TRAINING

9:00-10:30	Review of Survey Feedback Process A. Review mechanics of survey feedback presentation process	Objective 1. Given complexity of feedback process, review this while responding to questions of program leaders
10:30-12:30	Practice Sessions on Survey Feedback Process A. Break up into small groups and have each member take a turn doing the survey feedback process	Objective 1. Provide practice doing feedback with presence of N.U. trainer to help with difficulties
12:30-1:00	Lunch	
1:00-2:00	Trainers Lead Survey Feedback A. One of the Northwestern staff "role plays" as a program leader and presents survey feedback. Other program leaders role play teachers reacting to feedback and try to raise problems and issues	Objective 1. To provide an opportunity to see more experienced person do survey feedback and deal with problems people might raise during feedback session
2:00-3:30	Lecturette on Change Process A. Strategies for change B. Dealing with resistance to change C. Identifying resources for change D. How to implement change	Objectives 1. To provide techniques for dealing with resistance to change 2. To provide strategies for implementing change

3:30-4:00 Summary of Training

A. Review purposes of training

B. Respond to any questions from participants

5. Training for program monitors. A one-day session was held in February 1975 at Northwestern University for the program monitors from each of the participating schools. Program monitors were elected by the faculty in each school. Their role was to provide process guidance to the group and the leader, and to fill out the various communication and group process forms associated with the program. Given these tasks for the program monitor, the objectives for this training were as follows:

1) To present the mechanics of the program to the monitors so they fully understood it.

2) To provide skill training in:
   a) Being sensitive to group processes to enhance the effectiveness of the problem-solving meetings.
   b) Filling out communication forms so as to maximize their usefulness to the group and to the Review Committee (see Appendix J).
   c) Filling out group process forms (meeting monitoring and periodic project monitor form) so as to maximize their usefulness to the leader and monitor in improving the group process and the program functioning (see Appendix K).

The outline for the one-day training was as follows:

Time	Introduction	
9:00-9:15	A. Overview of day B. Purposes of training activities	
9:15-10:15	Overview of Program	Objective
	A. Presentation of the model of the program B. Discuss role of different individuals and groups in the program C. Detailed discussion regarding how the program works	1. To present clear understanding of how the program works and the underlying rationale for its different components

10:15-11:30	Lecturette on Problem Identification and Problem-solving Process A. How do you diagnose and identify organizational problems? B. Discuss stages of problem solving	Objective 1. Given that one of the roles of the monitor was to be an observer, it was felt they should understand problem-solving process
11:30-12:15	Group Problem-solving Exercise A. Participants do NASA simulation on individual vs. group problem solving and decision making	Objective 1. To sensitize monitors to group process as it affects how group does its task
12:15-1:00	Lunch	
1:00-1:30	Discussion of Group Process A. Show how group process affects group problem solving and decision making B. Point out what to look for in groups in order to improve group effectiveness	Objective 1. Review group process so that monitors are able to diagnose its impact on a group
1:30-2:00	Discussion of Mechanics of Monitor Instrument A. Discuss each of the monitor forms and their function 1) Meeting Monitor Form 2) Periodic Project Monitor Form 3) Communication Forms	Objective 1. To present a quick overview and exposure to different forms monitors would be working with
2:00-2:30	Discuss Communication Forms in Depth A. Discuss how forms reporting results of survey feedback are to be filled out B. Discuss how form reporting Review or Policy Committee actions are to be filled out	Objective 1. Provide skills for filling out forms

2:30-3:30	Discuss and Practice Using Problem-solving Meeting Form	Objective
	A. Discuss how this form is to be filled out	1. To provide practice
	B. View video tapes from program leader training to practice filling out Meeting Monitor Form	
3:30-4:00	Summary of Training	
	A. Review training	
	B. Answer questions	

Issues in program leader and program monitor training. Training for the teacher leaders and monitors began amid controversy. In order to alleviate the administrative and practical problems of teachers being absent from their classrooms three days, the district administration preferred a training schedule which included two Saturday workshops. The trainees were to be paid by the project budget for their attendance on these days. The teacher trainees, however, saw this as both a deliberate slight to them and an indication of lack of district support for the program. They refused to participate unless the administration agreed to schedule training during the school week. This seemed to be a manifestation of two recurring themes in the behavior on the part of the teachers. First and foremost, they really wanted an indication that their efforts in this program were administratively encouraged and would not be an idle exercise. Second, they were very sensitive to the issue of power in the district and were not willing to sacrifice the principle of negotiated agreements concerning the scheduling of meetings and hours of work. The bureaucratic-professional tension was closely related to the labor-management tension, and the desire for "professional autonomy" had in part assumed the form of "protecting the contract." If the administration wanted professional problem solving, it would have to provide time for it to occur.

Although the training sessions were rescheduled, it took a while to overcome the ill feelings which had emerged. As interventionists, we were assumed to be tacitly, and perhaps even unknowingly, acceding to district strategies to keep the teachers in a subordinate role. At the same time, our hands were somewhat tied. Because of our shaky position in the district, we had very little power, and we felt that the continuation of the project depended on our willingness to present as little administrative inconvenience as possible by insisting only on arrangements critical to the implementation of the project. In a real sense both the teachers and the administration were using us, the interventionists, as a buffer against each other, expecting the interventionists to work out arrangements that were satisfactory to them. This role as a "middleperson" plagued us for the entire first year. As researchers, we were dependent on the district to carry through with the program, and in many cases this entailed performing functions the members in the district were unwilling to assume. As the year progressed, we took a less active stance in the district, and to some extent the success or failure of the program in the various schools depended on whether the program personnel were willing to assume the new roles necessary for the program to continue.

During the training session, the teachers voiced concerns which demonstrated that for many schools the survey feedback program represented a strong departure from current attitudes and practices. The leaders felt that a major task would be to convince the faculty in their schools to expend effort on the program. As one teacher voiced it, "Our teachers have been taught by the district that their efforts are ignored." In another school, the leader and monitor said they though that their faculty would try this program, but if it fizzled it would probably be the last thing they would try. As the leader put it, "The group of teachers who are apathetic becomes larger with each failure."

Another concern of many of the teachers was how to get participation from all of the teachers, not just from the usual vocal group, many of whom held viewpoints different from the others. The leaders shared the concerns of the administrators that the program would be taken over by the same vocal group. They also perceived their faculties as split. Another potential problem area was how to include special education and itinerant teachers in the effort.

A related concern was that their faculties would not be willing to go through the orderly and somewhat slow process that the seven-stage problem-solving model implied. Many of the teachers viewed time spent in meetings as wasted and were "solution" oriented. The leaders feared it would be difficult to maintain the interest of the teachers as they tried to utilize the resources of the group in arriving at accurate problem definition and the best solution.

Two other concerns were foremost in their minds. First, they were concerned about their own source of legitimacy. Although they had been elected and received training, some of them did not feel as if their faculties would attribute legitimacy to either their own role or to the process. They were skeptical that they could take the model we had provided and "teach" their colleagues how to operate within it. In several cases, they were also concerned by the apparent failure of their principal to attribute legitimacy to their role.

Finally, the data itself was problematic. The teachers had been very negative about filling out the questionnaires. There had been complaints about its length, about the wording of items, about the response codes, and about having been asked to identify themselves on the questionnaire. (This had been done for project evaluation purposes only, and anonymity in the district had been assured.) In several schools, teachers had begrudged the effort required to generate the data and mistrusted the use to which the data would be put. Even more importantly, many did not have faith in the worth of the questionnaire or the validity of the responses to it.

Discussion of Training on Key Components of the Program

Given the complexity of the training that was provided in the OD program, it is impossible to discuss in detail what was presented in all the sessions. Here we will briefly discuss the material presented in the training sessions on the survey feedback process. This section will focus on the following components of survey feedback that the program leaders received: (1) feedback procedures and guidelines and (2) what to do at the first feedback meetings in the schools.

Feedback procedures. The following material was presented on feedback procedures. (Tables 5.1 and 5.2 illustrate with dummy data examples of a school summary profile and one complete category profile, respectively.)

Favorable vs. Unfavorable Responses: The information is fed back in terms of the percentage of favorable, unfavorable, or undecided responses. A favorable response is one which indicates positive feelings concerning the issues being tapped by the item. If the item is worded positively (e.g., "In general, I approve of school board policies"), an "agree" response is favorable. If the item is negatively worded (e.g., "It is sometimes difficult to obtain substitute teachers"), a "disagree" response is favorable.

In interpreting the information that is fed back, it is important to keep in mind that the scores indicate percentage of responses which are favorable, rather than percent agreement with the item.

Table 5.1

Hypothetical Summary Profile for Feedback

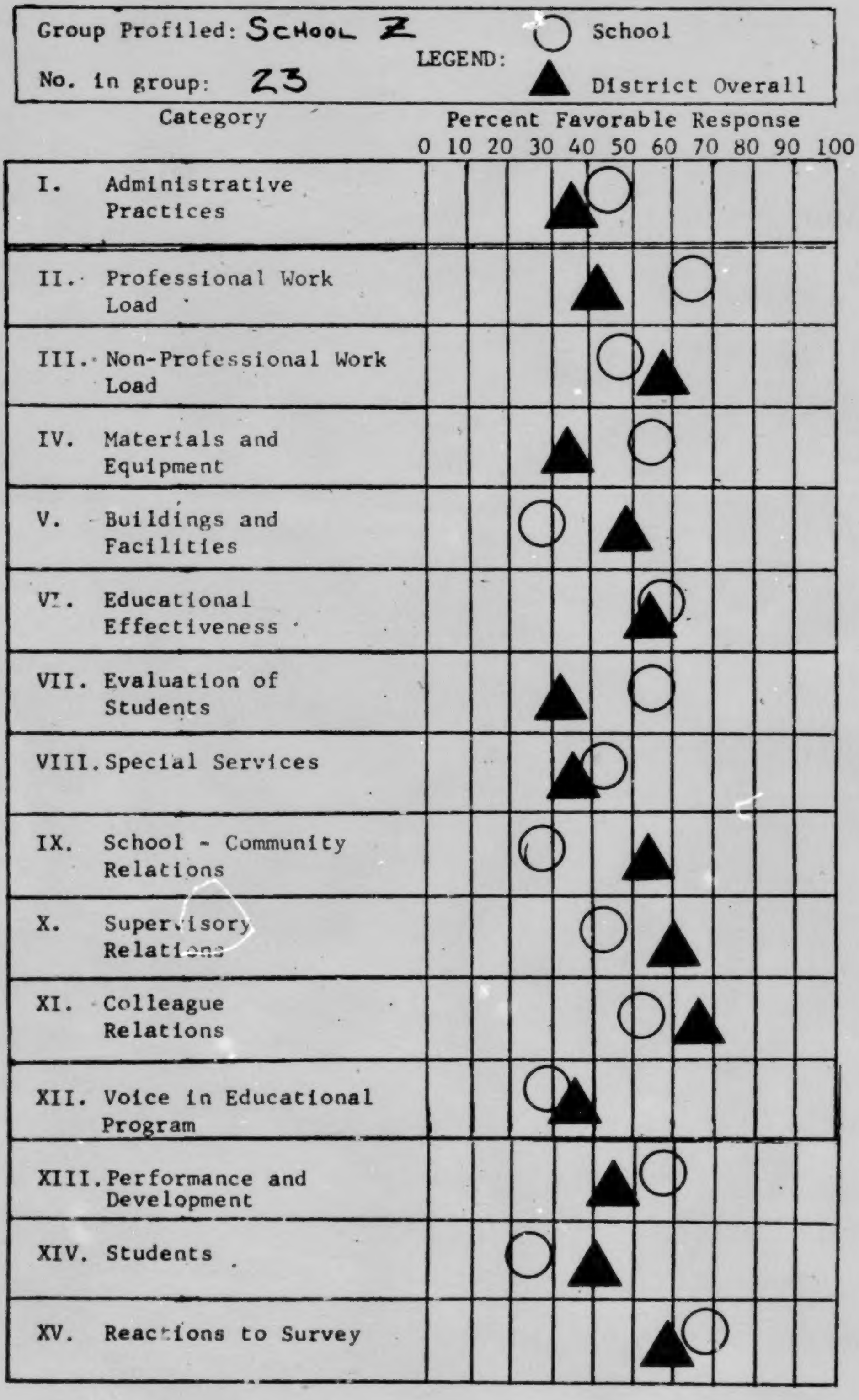
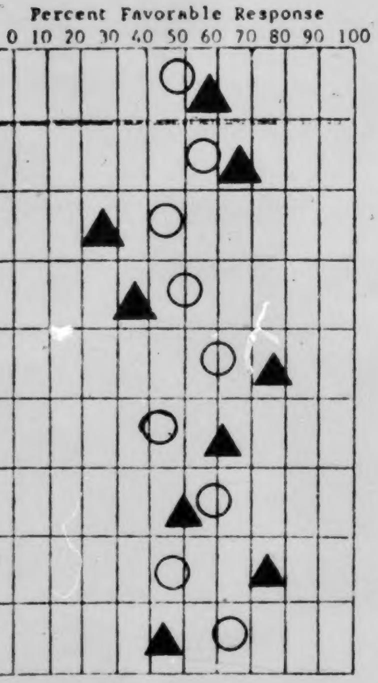


Table 5.2

Hypothetical Breakdown of Feedback Category

Category III Non-professional work load



Category III Non-professional work load	School %?	School %UF	School NA	School Mean	District %?	District %UF	District NA	District Mean
OVERALL								
62. Administrative paper work	6	39	2	3.1	7	27	19	3.3
8. Non-professional duty load	10	46	1	2.8	5	70	6	1.9
42. Clerical assistance	12	38	3	3.0	20	45	31	2.3
131. Extra-curricular activities	4	36	11	3.2	6	18	151	4.1
76. Communication from "higher-ups"	15	42	1	2.7	25	14	8	3.3
143. Educational responsibilities	22	20	0	3.1	10	31	4	3.0
[illegible]. Classroom interruptions	30	24	3	2.9	18	7	28	3.[illegible]
57. Paraprofessional assistance	4	32	4	3.5	6	51	55	2.7

		FR
62.	I am required to do too much administrative paper work (attendance reports, tardy slips, statistical reports, etc.)	D
8.	I am required to perform too many non-professional duties here (playground, hall, stairs, lunchroom and study hall duties).	D
42.	I receive sufficient clerical assistance to do my job effectively.	A
131.	So far as I am concerned, extracurricular duties (sponsoring student clubs and activities, etc.) are distributed fairly here.	A
76.	I am asked to read too many communications from "higher-ups" in this school system.	D
143.	This school assumes too many educational responsibilities that properly belong in the home or to other community agencies.	D
15.	Interruptions (messages, monitors, intercom bulletins) are kept to a minimum here.	A
57.	A proper amount of paraprofessional assistance is available to the teachers in this school.	A

Wording of Items: As you look back over the items, you may notice that some are worded more strongly than others. Thus, at face value it may appear that an unfavorable response to one item is a stronger negative comment than an unfavorable response to another. Also, it is possible on some items that there may be disagreement as to whether a particular response really is a negative commentary on the work situation.

It is best not to let the discussion focus on the particular wordings of items, but to concentrate on deciding whether the issue raised in the question is indicative of an underlying problem that merits the attention of the problem-solving group.

School and District Scores: Teachers in each school will receive data that represents responses from the teachers in the building (School Score) and responses from the teachers in the district as a whole (District Score). Both these scores will be plotted on the same charts. By comparing the two scores for categories and for individual items, it is possible to detect areas where your school deviates either positively or negatively from the district norm. This information should be helpful for a faculty to evaluate the strong and weak points of its school, at least in comparison with other schools in the district.

Summary Profile: The Summary Profile [Table 5.1] presents the percentages of favorable responses in each category. There are two ways of thinking about these percentages. First, they can be thought of as indicating the average number of favorable responses in that category--i.e., on the average each teacher answered, say, 60 percent of the tiems in that category favorably. So, if the category had ten items, on the average six items were responded to favorably.

The second way to think about this is in terms of the total number of possible positive responses. In a particular category there are X number of items (say, 10) which are answered by Y number of people (say, 20). Thus, there are X times Y total possible answers (e.g., 10 x 20 = 200). The percentage tells us what percent of this total was answered positively.

The Summary Profile is useful in detecting general areas which are perceived as comparatively favorable or unfavorable. It *may* be used to help decide which categories to focus on first in the feedback of the detailed results. However, it should be kept in mind that even in categories with a highly favorable overall response rate, there may be several items which had very unfavorable responses, and which may indicate underlying problems which could be important to the group members. Therefore, it is useful to look at every category individually.

Detailed Profiles: A profile of the items in each category is also presented. [An example of a detailed profile is included as Table 5.2.] For each item, three pieces of information will be fed back:

1) Percentage favorable responses
2) Percentage undecided responses
3) Percentage unfavorable responses

In interpreting each category and the individual items within the category, there are several things to keep in mind:

There are several possible interpretations that can be ascribed to an item. Bringing these interpretations out in the discussion can enhance the ability of the group in determining the underlying problem, if there is one.

Most of the items in the questionnaire represent symptoms of a problem rather than the problem itself. One of the principle reasons for having group discussions is to get at underlying problems.

The pattern of responses within a category may provide useful information in determining underlying problems. It is helpful to notice not only which items are unfavorable, but also those that received favorable responses. Each item score is data which may be helpful in focusing in on the problem area and its sub-components.

The items in the questionnaire are stated in general terms. The meaning of the responses only becomes clear when the group can deal with what it is in their work situation that caused the group to respond the way it did.

The items or the problem areas that they relate to will vary in salience or importance to the group and its members. Group discussion is a way to determine which problems the group perceives to be important enough to commit itself to go through the problem-solving process.

Next, we present the guidelines and procedures which can be followed in

the group discussions.

Guidelines for the Feedback Sessions

1. Your suggestions: An attempt is made to have the total group contribute to the discussion.

2. Diagnose problems first, suggest solutions later: Initial stress is placed on problem definition and specification; the generation of solutions is deferred. Suggestions and opinions are solicited regarding whether the survey results reveal problems and, if so, specifically what they are.

3. Group feels . . .: Group members are encouraged to say, "Perhaps the group feels this way because . . ." rather than "I feel so because . . ." to keep the discussion on a less personal level. This rule was designed to help the members express their thoughts as members of the group rather than as isolated individuals.

4. Titles, not names: To keep the discussions at the "objective" and "factual" level, the emphasis is on organizationl roles and relationships rather than on personal and interpersonal problems. Group members are encouraged to use job titles or organizational functions to be performed rather than names.

5. No leader evaluation: The program leader is encouraged not to evaluate member contributions. The objective is to have all members contribute their ideas and opinions without the feeling that their statements will be judged by the leader as "good" or "bad."

6. Minutes, but no names: The group monitor records the ideas expressed during the meetings but does not mention any names. Individual teachers or a subcommittee of the group are invited to review the minutes later to determine whether they accurately reflect the group's thinking.

7. Understandable specification of problems: Problems must be stated precisely and be understandable to people in other parts of the system.

8. Disagreement as source of ideas: The leader and members should perceive members' disagreement as a source of ideas rather than as an obstacle to problem solving.

Guidelines for first feedback meetings. The first survey-feedback meetings were critical to the entire intervention. It was at this point that the program leaders would be on their own as group facilitators. They not only had to feed the data back, but they also had to again address the issue of "Why are we doing this?". The following materials were presented to the program leaders to help them at the first meetings.

Preparation for the Feedback Meeting--Suggestions

Refer to the Summary Profile first, noting which categories deviate substantially from the district norm, which categories are high, and which categories are low.

We suggest that you get together with the monitor to choose three or four categories which you will prepare for detailed feedback, rather than try to thoroughly familiarize yourself with all categories. However, it would help to become familiar with the kinds of items in each category, both as an aid in choosing the three or four categories for the first meeting and in case some items from other categories are related to problem areas that end up being discussed in the meeting.

If you feel uncomfortable narrowing down the categories which you are prepared to feed back, an alternative would be to become familiar with all categories, so the group could decide what to consider first. However, that will involve much more preparation on your part, and will result in the group spending more time debating which category to deal with first.

In deciding which categories to prepare, there are several important criteria:

1) Does the category *deviate from the district norm*? If the district is very low on the category, it *may* indicate a problem too broad in scope to be effectively dealt with in the beginning.
2) Is the area *relevant* to the teachers? Based on your own experience in the school, you will want to pick areas that you know the other teachers are interested in.
3) Does the faculty have the *expertise* to deal with the area?
4) Is the area conducive to *task-oriented* results? Will changes in this area affect the work the teachers do?
5) If your school has an overall low profile, do not pick the worst categories to feed back. Try to pick a category where there is a good chance of progress.
6) What are the chances of *successful* change in this area?

In choosing categories, it is a good idea to look at the items within the category to get a good idea of the kind of data available.

After you have chosen the categories, become as familiar as possible with the data. This will affect the efficiency of the meeting as well as the satisfaction of the teachers with the data.

Before you feed back the data, it would be advisable to have a short Review Committee meeting in order to inform the principal of your plans. This will help reduce his uncertainty as to what is going to happen, as well as give him a chance to voice some of his concerns. At this meeting, you could also decide how best to make all the data available to interested teachers. This should be a Review Committee decision, because of the confidentiality of the data.

Suggestions for the First Feedback Meeting

I. Introductory Remarks--you may be asked some "why" questions:

Why another committee? Why will this one work when others have been failures? The reasons why we hope this will work include the following:

a) The training in group processes may help the "committee" perform more effectively.
b) Guidelines based on prior experience and research to facilitate the problem-solving process.
c) Mechanisms including the Policy and Review Committees for legitimating decision in the district.
d) Schedules and communication forms to insure that subsequent steps are carried out--i.e., that the decisions are actually carried through.

Why a questionnaire? Don't we already know our problems? The survey is only one part of the overall change effort, but it is a very important first step. It serves as a catalyst to start the process. It may reveal areas the staff is already aware of, but it is valuable for the following reasons:

a) It allows individuals to see to what extent perceptions are shared by all members of the system.

b) It "objectifies" the group perceptions in a manner that informal sessions cannot achieve.
c) It shows how the school differs from other similar organizations.
d) It provides specific focal points for problem solving and collaborative problem-solving efforts.

Why is collaborative problem solving important?
a) It provides a mechanism for pooling different perspectives, abilities, and information.
b) It provides the faculty in the school with mutual expectations that a change will be made. This facilitates the follow-through stage.

Is this program a communications program? In some ways it is:
a) It allows teachers and other district personnel to get a more accurate picture of what people are thinking and feeling about the district.
b) It provides mechanisms for improved two-way vertical communication.
d) It reduces premature communication and conflicting statements concerning problems--the type which rarely get dealt with in an organization.

Guidelines for the Group: This may be a good time to give some guidelines for group discussions. Otherwise, you may want to wait until the beginning of discussion of the data. This depends on how impatient the group is to get the data, and whether you anticipate that certain members may present problems to the group if guidelines are not spelled out early.

II. Tentative Overview of the First Three Meetings:

Meeting 1: Data feedback, problem identification, and statement of a positive change goal.
Meeting 2: Generation of alternative solutions to the problem area, feedback of additional data if there is time.
Meeting 3: Choose the best solution, decide on possible implementation procedures, fill out schedules and communication forms.

A general goal for the first three meetings is to gain the skills necessary to work as a problem-solving group. Point out that each step will take longer at first, but as the group develops expertise the process will become more efficient.

III. Presentation of the Summary Profile:

Before showing the profile, give an explanation of what the summary scores are:
a) The categories are sets of items that seem logically to fall together and to deal with a major aspect of the school district.
b) For each category, there will be two scores: the overall district score (either elementary or secondary) and the school score.
c) These scores represent the percentage of favorable responses to the items in that category.

Explain that you have selected a subset of the areas that you are prepared to feed back. Give reasons:
- a) To avoid information overload.
- b) To select areas that seem to be appropriate to start the program:
    - -relevance
    - -expertise
    - -chance of success
    - -task oriented

Stress the importance of starting out with a fairly simple problem:
- a) To gain expertise as a group.
- b) To establish legitimacy in the district through successful functioning.

Point out that all of the data is available (e.g., in the principal's office) and that the teachers are encouraged to look through it and suggest additional categories that should be fed back in later meetings.

IV. Display the Summary Profile:

As you go through each category, point out the ones that you would like them to choose from. Give them time to look at it and think about which category to deal with first. You might have them select by taking a simple vote, with or without discussion.

V. Explain the Scoring:

Explain the procedures that were used in calculating the scores for each item. (There is another sheet which deals specifically with this issue.)

VI. Display the First Category:

Reminder--even though you have already studied the data, keep in mind your role as facilitator rather than as interpreter. In other words, try not to impose you perceptions of the meaning of the data on the whole group.

As you go through the items, ask the teachers to be thinking of the following:
- a) How do their own perceptions compare with the group score? Why might there be a difference?
- b) How much agreement is there on the item?
- c) Does the item indicate a symptom or a problem?
- d) Is there a trend or pattern emerging?
- e) What are the underlying reasons and causes of symptoms and problems?
    - -informational
    - -skills
    - -priorities and values
    - -structures or procedures
    - -financial

f) Are the problems composed of sub-problems?
g) Try to avoid thinking of personalities and think in terms of roles.

VII. Problem Statements:

a) Encourage members to offer different statements of problems which may be evidenced by the data. This should be done with no evaluation.
b) After it is evident that there are no more problem statements forthcoming, ask the group to choose the best problem statement:
    - one they wish to deal with
    - one they have control over
    - one that is not solely financial
c) At this point, if there is not a real interest in any of the problems in that category, decide which category to display next.
d) When the group has chosen a problem statement, go on to the next step.

VIII. Change-Goal Statement:

The problem statement must be changed to a positive change/goal statement before solutions are generated. E.g.,

Problem statement: Teachers do not share teaching ideas with each other very often.

Change-Goal Statement: We will initiate procedures for teachers to regularly share their ideas with one another.

Recommendations for the Program Leader for the First Few Meetings

1. Don't delegate responsibilities to sub-committees until the whole group has learned to function together.

2. Don't let people get in a big discussion concerning the validity of the data. Rather, they should talk about the possible problem areas.

3. Stress the confidentiality of the data.

4. Stay objective, task-oriented, and positive.

5. Don't discuss personalities.

6. Try not to be evaluative or to side with a sub-group, at least at first.

7. Don't let a few group members dominate. Attendance will fall off unless there is general participation.

8. Don't let people launch into "war" stories.

9. If there is conflict, determine where there is agreement before proceeding with the discussion.

10. If people are not listening to each other, have them restate what others have said before going on.

Evaluation of Program Leader and Program Monitor Training

Both the program leaders and the program monitors were required to perform some rather complex skills as part of their roles. We designed the training programs with the objective of trying to provide them with skills in a relatively short training period. As a result, we were sensitive to the adequacy of the training. A short evaluation form was sent to each group in order to get feedback upon which to design the training for the next year.

Program leader training evaluation. Table 5.3 presents the data on how well prepared the program leaders felt they were on the key components of the OD program. The program leaders felt unprepared in Dealing with Resistance (40 percent), Dealing with Conflict (40 percent), Problem Solving (30 percent), Change Processes (20 percent), Group Processes (20 percent), and Feedback Techniques (20 percent). The next training program was generalized to provide more input in these areas. The program leaders also indicated rather strongly that the training period should be five days rather than three.

Program monitor training evaluation. Table 5.3 indicates that the program monitors felt most unprepared in Use of Evaluation Forms and Procedures (18 percent), Change Processes (10 percent), Communication Forms and Procedures (9 percent), and Group Processes (9 percent). The program monitors also felt that the training should be two days rather than one.

Perhaps the single most important shortcoming of the monitor training was that they were not trained with their program leaders so that they could develop into a team. In the training that took place during the last year of the project, monitors were trained with their program leaders.

Table 5.3

Program Leaders' and Monitors' Perceptions of Preparedness for Program Components as a Result of Training

	Very Unprepared				Very Well Prepared
Program Component	1	2	3	4	5
Program Leaders (N=10)					
Feedback		20.0%	30.0%	30.0%	20.0%
General knowledge of program			20.0	50.0	30.0
Stimulating faculty interest			60.0	30.0	10.0
Data interpretation		10.0	40.0	40.0	10.0
Group processes	10.0%	10.0	50.0	30.0	
Problem solving		30.0	40.0	30.0	
Change processes		20.0	60.0	20.0	
Dealing with resistance	10.0	30.0	30.0	30.0	
Dealing with conflict	10.0	30.0	30.0	30.0	
Mechanics of the program			50.0	40.0	10.0
Program Monitors (N=11)					
General knowledge of program			18.2	54.5	27.3
Data interpretation			18.2	45.4	36.4
Group processes		9.1	63.6	18.2	9.1
Problem solving			60.0	20.0	20.0
Change processes		10.0	40.0	40.0	10.0
Communication forms and procedures		9.1	27.3	45.4	18.2
Evaluation forms and procedures		18.2	36.4	36.3	9.1

Interim Results of First Year Implementation

The interim findings of the OD program will be discussed in detail in later sections. However, before discussing the findings it is important to briefly discuss the start-up of the OD project in the district. As the previous discussion of the training process indicated, participants had some serious questions about the feasibility of the intervention. Despite the issues raised in the program leader training during the first year, the Program Groups in the schools met, received feedback data and discussed it, and began to both identify and solve problems during the Spring of 1974. Four of the high school Program Groups and six elementary school groups met through the Spring, well beyond the first three released-time meetings provided by the district. After the released-time meeting sessions were completed, teachers either came to school early or left late in order to have time to meet in their Program Groups.

Although there were some subgroups in schools which did not participate in Program Group meetings, district administrators' prediction that faculty would not exert a constructive, cooperative effort in problem-solving activities was inaccurate. However, two elementary schools did stop meeting when released time was no longer provided. In one case, this was due to a conflict over a proposed solution and in the other case the teachers did not identify any problems which generated their interest beyond the three released-time meetings.

At the end of the 1974 school year, seven of the participating elementary schools had decided to continue the program in the upcoming year. The high school subsequently dropped out because leaders and monitors could not be found to replace those who were transferred from the school or who were resigning for other reasons. The Principal Group, which had solved a pair of problems resulting in changes in district procedures, was never reconvened in the 1975 school year. This was due partially to a lack of leadership, partially to a lack of interest due to the image that this group only consisted of principals of schools which happened to be participating at the school level, and partially to the uncertainty and demands involved in adjusting to the administrative style of a new superintendent, who arrived in October 1975.

Evaluation of Initial Functioning of Program Components

At the end of the 1974-75 school year, a preliminary evaluation was done to see how the OD program functioned during the last three months, when all components of the program were functioning for the first time. Extensive interviews were held with the program leaders, program monitors, and principals in the participating schools (see Appendix L). These interviews were conducted in order to get participants' opinions as to what were the strengths and weaknesses of the OD program. This information would then be used in the training sessions in the 1975-76 school year.

In general, the program functioned differently in each school and met with varying degrees of faculty and administrative enthusiasm. Also, the program guidelines were adhered to more carefully in some cases than in others. A cooperative effort was established in some of the schools; in others there was dissension. Some faculties successfully tackled several areas that they considered to be problematic, while others experienced more difficulty identifying problems they wished to deal with and/or finding solutions which were acceptable to all.

The program functioned in eight elementary schools and one high school.

The elementary schools each had one Program Group, whereas there were five Program Groups in the high school. Even within the high school, the groups varied greatly in enthusiasm and successful problem solving. Also, because of the size of the high school, the program experienced more difficulties there in areas such as internal diffusion of ideas and establishing cohesive groups. Nevertheless, some substantial results did emerge in the high school, and toward the end of the year the high school leaders and monitors were developing strategies to deal with the problems posed by the size of the staff.

This discussion of the initial functioning of the OD program will cover: (1) a general overview of the problems the Program Groups identified and worked on; (2) the general impressions of the level of OD program-related activity in the participating schools; (3) a general summary of the results of the principal interviews; and (4) a general summary of the results of the interviews with program leaders and program monitors.

General Overview of Problems Worked on in Program Groups

The problems which were dealt with fell into five general categories, with a few miscellaneous ones. The following lists include solutions in various stages--some had been adopted as of June 1975 and others were still in the planning stage, with intentions to initiate changes in September 1975. The general categories and examples of the problems areas are:

1. Improving Communications, either in general or relating to specific task areas
   - initiating a complete school calendar so that teachers and specials can easily find out about school activities and classroom activities such as field trips, etc.
   - itemizing the equipment and materials available to teachers and the location of each
   - establishing an interdepartmental liaison system

2. Utilization of Facilities
   - developing a sign-up system to increase the use of the library when the librarian is not present
   - developing quiet work areas for the teachers
3. Student-related Problems
   - developing new procedures for dealing with truancy, class and study hall skipping
4. Basic Skills
   - developing procedures to more successfully individualize reading instruction for students
   - developing procedures to aid in diagnosis and remediation of students with problems in the basic skills areas (high school)
5. Special Services
   - several faculties attempted to secure additional special services to deal with children with special learning problems
6. Miscellaneous
   - developing special programs for students (e.g., field day)
   - securing clerical volunteers

Thus, in the three months since the OD program components had been in full operation, the groups were identifying and working on very specific problem areas in their schools.

General Impressions of Level of OD Program-related Activity in the Schools

We were particularly interested in seeing how much effort was being exerted in the participating schools. All Program Groups met for at least the first three released-time sessions. Table 5.4 shows the number of additional meetings held in each school, reported anonymously, as well as the average percentage of staff in attendance. In general, it was reported that attendance fell off during the last few weeks of school.

From the data it can be seen that there was a substantial number of meetings beyond the first released-time ones in some of the elementary and

Table 5.4

Additional Meetings and Attendance Rates for Program Groups

	Number of Additional Meeting (after the first three)	Average Percentage of Staff Attendance
Elementary Schools		
A	3	75%
B	8	100
C	2	90
D	6	75
E	4	50
F	3	80
G	1	95
H	2	75
High School Groups		
1	9	50
2	9	25
3	9	20
4	9	20
5	0	0

high school groups. This indicated a high degree of involvement and commitment on the part of the teachers to the OD program. This level of activity in selected schools was due in part to the feeling teachers had that "for once we are being able to constructively work on problems relevant to our experience in our buildings and have some influence regarding how they are to be solved." Teachers felt that they were having some impact and this was rewarding enough to them so they were willing to invest additional time of their own.

When this data on level of effort was fed back in August 1975 to the interim Superintendent, he indicated both surprise and satisfaction. He indicated that his initial assumption regarding little teacher commitment to constructive action was wrong. He agreed that they were investing a lot of their own time in the activities of the OD program and that this was resulting in some effective problem-solving activities.

Synopsis of Interviews with Participating School Principals

Nine principals were interviewed to get their impressions of the program. Table 5.5 shows their responses to selected interview questions. From this synopsis, several findings emerge. First, the OD program was having some impact in the schools in identifying and working constructively on problems. Second, the principals in general did not see the program as being counterproductive and causing problems rather than helping to solve problems. Third, the program often created ambiguity regarding the roles of the different participants. This may have been due to its complexity, training inadequacies, or both. Fourth, the problem-solving process was more difficult for teachers to perform than had been anticipated. More emphasis had to be placed on following through once problems were identified and getting feedback on what

Table 5.5

Principal Responses to Selected Interview Questions[1]

How would you characterize the interest level of your faculty in this program?

Don't know	(1)
High	(5)
Low	(1)
Medium	(1)
Half high-half low	(1)

How would you characterize your reactions to the program?

More positive than negative	(2)
Mostly positive	(4)
Negative	(1)
No answer	(2)

Do you perceive the Program Group as permanent?

Yes	(2)
No	(1)
Hope not	(1)
Possibly	(5)

Do you perceive the Program Group as legitimate?

Yes	(7)
No	(2)

How are Review Committee meetings handled in your school?

Informally	(8)
Formally	(1)

Attendance: In most cases, leader, monitor, and principal

Additional comments: One principal perceived the meetings as people bringing complaints to him.

One principal perceived himself as having to take responsibility for initiating Review Committee meetings.

Table 5.5 (continued)

Has the role you play in this program affected your role as principal?

- Role: No change (6)
  - Made job easier (1)
  - Made me cognizant of some of the concerns of teachers (1)
- Do things differently: No (6)
  - Don't hold faculty meetings as often (1)

Has the program affected the role of teachers in the school?

- No (5)
- Yes (4) -Gave teachers a reason to initiate and work on problem solving
  - -Increased displays of friendliness among teachers
  - -Vocal people now have forum to dominate and cause problems
  - -People go to the leader with problems and questions

Should the principal be present at any or all of the Program Group meetings?

- No (5)
- As needed (2)
- Short part of each (1)

Did the program perform a function in your school?

- Improved interstaff relations (2)
- Focused attention on constructive measures (1)
- None (1)
- Has good potential but not yet realized (1)
- Allowed teachers to express selves and feel safe and comfortable in doing so (1)
- Too early to tell (1)

Did the program cause any problems in your school?

- No (7)
- Became a gripe sessions and forum for vocal people (1)
- Caused dissension among the staff (2)

How much time was required on the part of the principal?

- Negligible, minimal, not excessive (8)
- No answer (1)

Table 5.5 (continued)

How much time was required on the part of the teachers?	
Leader invested a significant amount	(3)
Not excessive	(4)
Some teachers complained about the scheduling of meetings	(1)
Some teachers complained about the time spent in meetings	(1)
What strengths does the program have?	
Provides avenues for legitimation	
Makes people look at problems with constructive approach	
Provides a way for faculty to deal with problems, that is, not limited to a "bitch session"	
Provided problem-solving skills	
Teacher involvement has increased	
Solutions actually emerge from teachers	
It gets results	
None	
What weaknesses does the program have?	
Manadatory meetings caused problems	
The guidelines resulted in my staff not tackling any of their real problems--lost interest	
Didn't focus on educational issues (mentioned twice)	
The process moves slowly	
The faculty never became united in favor of the program	
Causes dissension if 100 percent don't participate	
Can't be such a thing as a democratic school, although the program makes the faculty feel there should be	
Internal diffusion in a large school is difficult	
Group leaders often are not cognizant of the attitudes of group members	
None	
What changes or modifications would you suggest?	
Should only be continued if 100 percent of the teachers participate	
Need more sessions for give and take among principals	
Clarify the role of the principal	
Leader, monitor and principal should be trained together	
Interventionists should meet with principal and staff in each building to clarify the program	

Table 5.5 (continued)

What changes or modifications would you suggest? (continued)

Need to stress steps of carrying through with things--and the responsibilities involved at all levels

Because of heavy work loads, teachers should be encouraged to deal with one issue at a time

Need to clarify the structure for reporting to the principal

Unwillingness of teachers to learn the process

Provide a way for teachers to determine priorities

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[1] The numbers in parentheses refer to the number of principals responding that way.

happened to them as the problems moved upward to the school Review Committee (principal, program leader, program monitor, and principal designatee). Fifth, a real need was perceived for developing the principal-teacher-monitor team. This need is integrally related to the need for role clarification mentioned earlier.

Synopsis of Program Leader and Monitor Interviews

All 13 program leaders and 12 of the monitors were interviewed. Table 5.6 shows their responses to selected interview questions. From the interviews several findings emerge. First, the program leaders and monitors felt that the OD program was leading to more cooperative efforts in their schools and more effective working relations with their principals. Second, it was quite apparent that the time requirements for the program monitors and leaders were greater than had been anticipated. Third, the program leaders often encountered some hostility from people in their Program Groups who were resistant to the OD program. The program leaders had, in fact, become "lightening rods" that attracted flak from people who were against the program. Fourth, program leaders and monitors felt they needed more training and, in fact, should be trained together. Fifth, and tied in with this need for more training, was the need for further clarification and definition of program roles and procedures. We encountered the same set of needs in the principal interviews. This issue deserves a somewhat larger discussion than the others.

Reflections on Program Design

The source of the ambiguity and lack of role definition which program personnel expressed in the interviews is not clear. One source may be the relative complexity of the program. Relative to other OD programs in schools and other organizations (especially those using survey feedback), the design of our program is more complex by virtue of the structural relationships

Table 5.6

Program Leader and Monitor Responses to Selected Interview Questions[1]

How would you characterize the interest of the faculty in this program?

Elementary:	High	(7)	High School: (of those participating)	
	Mixed	(7)	High	(7)
	Moderate	(1)	Committed	(1)
	Low	(1)	Willing to try	(1)

Were any activities carried on in between meetings?

Visited teachers in other schools to determine how reading groups were handled	(1)
Sub-committee meetings	(1)
Agendas circulated	(1)
Leaders and monitors met together often	(1)
Memos sent out--comments solicited	(4)
People researched handling of problems in other high schools in area	(2)
People drafted proposals for change	(1)
Conducted in-school surveys	(1)

Does your faculty perceive the group as permanent?

Elementary:	Yes	(7)	Secondary:	Yes	(4)
	No	(7)		No	(3)
	Don't think so	(1)		One more year	(1)
	They hope so	(1)		Some do	(1)

Does your faculty perceive the group as legitimate?

Elementary:	Yes	(10)	Secondary:	Yes	(5)
	No	(1)		No	(1)
	Don't think so	(1)		Don't know	(1)
	Some do	(1)		Some do	(2)
	Most do	(1)		Somewhat	(1)
	Not sure	(1)			

How would you characterize the reactions of your principal to the program?

Resistant to our ideas	(2)
Positive	(15)
Recognizes our accomplishment--supportive	(1)

Table 5.6 (continued)

How would you characterize the reactions of your principal to the program? (continued)

Doesn't both him	(1)
OK if we pick an area not impinging on his jurisdiction	(1)
Better than at first	(1)
Gives it 100 percent	(1)
Cooperative but doesn't follow through	(1)
Sees possibilities but doesn't make support evident	(1)

Has the role you play in this program affected your general role as a member of the faculty?

Yes	(5)
No	(13)
No negative effect	(1)
Some antagonism from a few other teachers	(4)
More people discuss problems with me	(1)
I talk less in meetings	(2)
Can assume an additional useful role	(1)
Increased respect	(1)

Has the program affected the role of the principal? Does he do anything differently?

Role:	Yes	(3)
	No	(16)
	?	(3)

Does things differently:	Yes	(7)
	No	(11)
	Doesn't hold so many meetings	(1)
	Tends to use group for non-OD issues	(1)
	Informs us earlier about things	(1)
	Provides more information and feedback	(1)
	Communicates better	(2)
	More aware of our concerns	(2)

Table 5.6 (continued)

What (if any) resource people have been utilized by the group?

Head of reading program
Principal
Special services coordinator
Reading specialist
Psychologist
Social worker
Nurse
Traffic engineer
Maintenance man
Attendance office
Guidance office
Doctors
Deans
Curriculum director
Special education teacher

Do you feel the principal should be present at any or all of the Program Group meetings?

Yes	(1)
No	(12)
Only some	(1)
As resource when asked	(6)
No harm would be done	(1)
If he wants to be	(1)

How much time has been required on your part?

Leaders in elementary schools	1-3 hrs./meeting
Monitors in elementary schools	1/2-2 hrs./meeting
Leaders in high school	2-5+ hrs./meeting
Monitors in high school	Very little-2 hrs./meeting

(all times listed are in addition to time spent in the meetings)

Do you feel the program is filling a need or function in your school?

Yes	(10)
No	(1)
People feel they can relate better to principal	(1)
People sit down together and talk about things	(9)
People feel a stake in the decisions made in the school	(2)
Crystalizes thinking of teachers	(1)
For those who participate--cooperation and openness	(1)
People feel they can say what they think	(1)

Table 5.6 (continued)

Do you feel the program is filling a need or function in your school? (continued)	
Provides administrators a chance to see that faculty can solve problems	(2)
Vehicle to solve problems	(1)
Outlet for creative ideas of teachers	(1)
Is the program causing any problems?	
Personally for me -- people who resisted the program were on my back about it	(1)
Accelerated some already existing personality clashes	(1)
No	(17)
Some resent time	(1)
Some bad feelings caused by one problem area	(1)
Negativism surfacing among non-participants	(1)
What have been the weaknesses of this program?	
The forms	(2)
Many problems unsolvable--either personality or negotiable	(1)
Not enough time left in year to solve problems	(1)
Need more faculty openness	(1)
Need released time for meetings	(1)
Amount of time required to reach good solution	(2)
Monitor training inadequate	(1)
Staff had negative attitude	(4)
Dual role of leader as facilitator and information source	(1)
Faculty afraid of repercussions from other faculty for things they say	(1)
Relies on strong leader and monitor	(3)
Slow response from principal	(1)
Intergroup cooperation lacking	(1)
Mandatory meetings (high school)	(2)
What are the strengths of the program?	
Teachers get a chance to talk with each other as a professional group, meet alone together, etc.	(1)
The data	(2)

Table 5.6 (continued)

What are the strengths of the program? (continued)	
The records kept to document events	(1)
Objectives are good	(1)
Achieves success	(2)
Faculty more cohesive and confident	(1)
Individuals expressing selves for first time	(2)
The procedure suggested	(6)
Faculty input possible	(1)
Faculty works together	(3)
Allows faculty to turn gripes into constructive action	(2)
Created a more positive attitude among teachers	(1)
The training	(1)
Deal with causes rather than symptoms	(1)
Communication channels	(3)
Faculty handling educational problems	(2)
Sense of legitimacy	(1)
The structure and formality	(1)

What changes would you suggest for the program?	
Train leaders and monitors together so they are aware of each other's roles	(4)
More training for monitors	(4)
Separate elementary and secondary training	(2)
Need help in problem statements	(1)
Need more role playing and simulations in training	(4)
Need burden to fall on larger number of people--perhaps eventually train people from each grade level	(1)
Reduce complexity of data	(1)
Workshops in summer, not during school	(5)
Clarify roles	(1)
Leaders should choose monitors	(2)
Must start at beginning of year	(1)
Need better presentation at beginning by Northwestern	(1)
Need some common training period for leaders, monitors and principals	(2)
Refresher session after first three meetings	(1)
Realistic assessment of time demands	(1)

Table 5.6 (continued)

What suggestions do you have concerning the continuation of the program in the Fall?

Have my faculty revote to see if committed	(2)
Additional training on roles, definition of kinds of problems that can be solved, how to handle personality situation, conflict	(12)
Have released time for several meetings	(1)
Start meetings at very beginning of year	(3)
Have leader, monitor and principal all meet together with representative from Northwestern to clarify some problem areas	(2)
Need skills to handle conflict and confrontation between peers	(2)
More training for monitors	(1)
Should begin again with data	(2)

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[1] The numbers in parentheses refer to the number of leaders and monitors responding that way.

established; the involvement of multiple organization levels; the specifications of rules, procedures, and guidelines; and the format and content of the data which were fed back. This high degree of program complexity was no doubt made to seem even more complex by virtue of the relatively brief training for program personnel.

Unfortunately, complexity is not an attribute capable of being "traded off" with some other. We subscribe to Ashby's "Law of Requisite Variety" (Ashby, 1956; Weick, 1969), which dictates that the complex problems which face educators at the school and district level (and which we assume to exist) can only be solved using a process at least as complex as the problems themselves. In fact, our program design made another trade-off to allow the requisite complexity to exist, within constraints of money and expertise. Training school personnel to have all the skills and expertise to properly operate the OD design would have demanded much more time and much more money. These skill needs were (hopefully) decreased by the formalization of the program which we attempted through heavy documentation, by manuals of guidelines and procedures for participants, and by the other structural aspects of the program. The necessary complexity of the problem-solving process could be achieved through either (1) giving program personnel multifaceted skills in such things as interpersonal relations, conflict management, data interpretation, problem diagnosis, solution evaluation, implementation, change strategies, etc. or (2) providing a structure and a set of guidelines and procedures which would tend to minimize the need for such skills or substitute for them. Although any program must be a mix of both approaches, ours opted for stress on the latter.

The drawback of such an option is manifested by the kinds of interview comments we encountered, i.e., expressed ambiguity and lack of role clarity. Our structural approach invariably leaves "cracks" which are not filled by procedures or guidelines. Furthermore, we created situations which demanded training we did not give. An example of the latter problem is the leader-monitor "team." Our guidelines differentiated the roles and our training reflected that differentiation. We failed to fully realize, however, that (human perceptions being what they are) our formally defined roles might not, in fact, dovetail as neatly as we envisioned when they were operationalized by the actual role incumbents. In other words, leaders and monitors interpreted their roles as they wished and developed expectations of the other. These interpretations and expectations were often incompatible to some degree--thus the expressed need for role clarification and team training, which treat the symptom and the cause, respectively. Similar arguments can be made for the need of some team building or role negotiation for the principal, leader and monitor groups also. Our second-year training reflects our attempts to come to grips with these issues. Procedures were clarified; leaders and monitors were trained together. We also held some meetings in which principals, leaders, and monitors (and the new Superintendent) participated. These adjustments are more fully described in the next section and elsewhere in this report.

It is important to note that the interviewees never referred to the program as "too complex" but rather always voiced the symptomatic ramifications of the program's complexity. Presumably, this could mean that the program's complexity was accepted (either out of a realization that its degree of complexity was required or out of deference to our "expertise"). Our response to these symptoms was of a dual nature. On one hand, we treated the symptoms by providing additional procedures and guidelines, thus increasing the formal complexity. On the other hand, we decreased the structual complexity by removing our strong differentiation between leader and monitor, combining them in a single structural unit or "team," letting them, through their own complex interpersonal process, negotiate and define their own roles. In this latter procedure, we are merely substituting the complexity of their interpersonal process for the complexity of our original differentiation. Most observers would claim that doing so actually increased the total complexity which the group problem-solving process can invoke when confronting a process. It is important to note that any benefits of the switch to a team orientation will be realized at the cost of training both the leader and the monitor and giving them both the requisite team skills.

Finally, there is much basis upon which to defend the basic structural approach of this OD program. Despite the expressions of ambiguity and lack of clarity, there are considerable indications in the interim interviews that the high structuredness served a definite function. Superficially trained (perhaps "rudimentally trained" is a better term) personnel went back into their schools and performed. Initially, many of these people relied heavily on their training manuals and followed the "rules of the game" as we had presented them. As they performed their roles, however, they were learning. Many personnel (even the interim Superintendent) reported an understanding of, an appreciation of, a skill in, and a feel for the new way of doing things inherent in the OD program design. A significant amount of learning was in the doing.

This last point holds true for us as well as for them, and the next section discusses in more detail our revisions in training for the second academic year.

Revised Training: Second Academic Year

As a result of the evaluations of the first year training sessions, it was decided to hopefully expand the days of training for program leaders and monitors and to train them together. Because of time pressures in the district, it was not possible to expand the training program beyond three days. However, it was possible during the 1975-76 school year to train new program leaders and monitor leaders together. This was beneficial in that they were to work as a team and thus, by participating in the training together, they would hopefully have a much better understanding of each other's role and how they could work together in making the Program Groups operate effectively. The materials used in the revised training were basically the same as those used during the previous training sessions, with some revisions and several additional sections.

Below are the agendas of the three-day training session. The first two days were attended only by two newly elected leaders and three monitors. The third day was attended by all continuing leaders and monitors as well as the five newly elected personnel. The training was at Northwestern University, Graduate School of Management on September 30, October 2, and October 7, 1975.[1] The objectives of the first two days of training were as follows:

1) To present the mechanics of the program and the rationale for each component to the new personnel.

2) To provide skill training in:
    a) being sensitive to group processes to enhance the effectiveness of the problem-solving meetings
    b) conducting the feedback of survey information
    c) the problem-solving and decision-making sequence
    d) the mechanics of filling out and the use of the monitor forms.

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[1] Conducted by Dr. Robert B. Duncan, Professor of Organization Behavior, Graduate School of Management, Northwestern University; Dr. Robert A. Cooke, Study Director, Institute for Social Research, The University of Michigan; Allen M. Mohrman, Jr., School of Administrative Science, Ohio State University; Susan A. Mohrman, Organization Behavior Department, Graduate School of Management, Northwestern University; and Ken Phillips, Graduate School of Management and School of Education, Northwestern University.

DAY ONE TRAINING

Time	Introduction to Training	
9:00-9:30	A. Outline of three days of training B. Point out rationale for training components C. Respond to general questions regarding project	
9:30-10:45	Overview of Program	Objectives
	A. Presentation of seven-stage change model B. Discussion of roles of individuals and groups in the program C. Detailed discussion of how the program works	1. To present clear understanding of how the program works and its underlying rationale 2. To present a clear understanding of the seven-stage change model
10:45-11:30	Lecturette on Group Processes	Objective
	A. What to look for in groups in order to improve their effectiveness	1. To provide general acquaintance with group processes
11:30-12:30	Group Problem-solving Exercise (video tape)	Objective
	A. Participants do Desert Survival[1] simulation illustrating individual vs. group problem solving and decision making	1. To provide practice and experience in how group processes can effect problem solving and decision making
12:30-1:45	Lunch and Viewing and Discussion of Video Tape of Desert Survival Simulation	Objectives
	A. Participants and trainers view the tapes and discuss the group processes in evidence	1. To recognize the processes which occur in groups 2. To see the impact of group process on group effectiveness

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[1] Developed by Human Synergistics, J. Clayton Lafferty, Patrick M Eady, and Alonzo W. Pond, Plymouth, Michigan: Experiential Learning Methods, 1974.

1:45-3:45 Group Problem-solving Exercises and Discussion of Processes

A. Participants do first Hung Jury simulation which focuses on reaching consensus in decision making and problem solving

B. Discussion of processes in this simulation

C. Participants do second Hung Jury simulation

Objective

1. To provide more experience in group functioning and how to recognize group processes

3:45-4:00 Summary of Day

A. Stress cooperative role of leader and monitor in assuring effective group climate that maximizes participation and commitment on part of teachers involved, and that enhances group effectiveness in problem solving and decision making. Emphasis on the role of facilitating group functioning and diagnosing problems that a group might experience as it operates.

B. Hand out interim report to familiarize new leaders and monitors with the progress of the program in the district during the previous school year, and the reactions of last year's personnel to the program.

DAY TWO TRAINING

9:00-9:30 Introduction

A. Review topics covered in first day

B. Deal with questions from first day

C. Present overview for second day

9:30-10:30 Lecturette on Problem Identification, Problem Solving and Decision Making

A. Discussion of problem diagnosis

B. Presentation of problem solving sequences or paradigms

Objective

1. To present framework, techniques and skills for:
   a. Problem diagnosis
   b. Problem solving
   c. Leading problem-solving groups

	C. Link group processes to effective problem solving D. Discussion of techniques to increase problem-solving effectiveness	
10:30-11:30	Presentation of Survey Feedback Process A. Trainer demonstration and discussion of steps in the feedback of survey data B. Actual feedback of "dummy" data C. Explanation of the meaning of the various statistics which are fed back	Objectives 1. To present skills and techniques for feeding back data 2. To review interpretation of the data
11:30-12:00	Practice in Problem Identification A. Participants use "dummy" data to diagnose problems, subproblems, and causes	Objective 1. To provide understanding of problem identification sequence
12:00-12:30	Presentation of Communication Forms A. Discussion of sample upward and downward communication forms and their use B. Explanation of importance of written communication forms	Objectives 1. To provide understanding of relationship of forms to group problem-solving sequence 2. To provide understanding of purpose, use, and importance of communication forms
12:30-1:00	Lunch	
1:00-2:00	Group Problem-solving Exercise (video tape) A. Participants do the Layoff simulation	Objectives 1. To provide opportunity for teachers to apply skills covered in problem-solving presentation 2. To provide an example of decision making where values are an important factor

2:00-2:30 **Practice with Meeting Monitoring Form**

A. Fill out form based on video tape of simulation

B. Review of group task and maintenance functions

Objectives

1. To provide opportunity to recognize group processes
2. To practice using meeting monitoring form based on actual group functioning

2:30-3:30 **Practice Sessions on Survey Feedback Process**

A. Each member takes a turn doing part of the survey feedback procedure

Objective

1. To provide practice doing feedback with presence of N.U. trainers to help with difficulties

3:30-4:00 **Summary of Day's Training**

The emphasis of day two was on the first stages of the seven-stage change model: problem evaluation using the survey feedback process to stimulate problem identification and the problem-solving process. Considerable empahsis was placed on tying together the more general group process materials from day one with the more task-oriented material of day two.

The objectives for the third day of training were as follows:

1) To acquaint all leaders and monitors with new procedures.

2) To provide additional training in areas in which leaders and monitors felt weakest.

3) To review important aspects of the program that caused problems in some schools during the previous year.

4) To stress the importance of teamwork between the leader and monitor in a school.

An outline of the third day of training appears below.

DAY THREE TRAINING

Time — Introduction

9:00-9:30

A. Present overview for third day

B. Deal with questions from previous training days

C. Deal with questions from continuing personnel who have not been at first two days of training

9:30-10:45 **Review of Program Mechanics**

- A. Go through sample communication forms to review stages in problem-solving sequence
- B. Explanation of procedures for calling Review and Policy Committee meetings and use of communication forms in conjunction with these meetings
- C. Review of roles of key personnel and groups in the program
- D. Review of purpose and timing of all monitor forms

Objectives

1. To "refresh" continuing personnel concerning mechanics and rationale of program
2. To clarify areas that caused problems
3. To update leaders and monitors concerning procedures
4. To stress importance of written communication in the program

10:45-11:45 **Lecturette on Communication Processes**

- A. Discussion of defensive and non-defensive communication
- B. Discussion of reception and transmission skills

Objectives

1. To provide basic understanding of communication processes
2. To make leaders and monitors aware of their roles as communication models for the group

11:45-12:30 **Lecturette on Change Process**

- A. Strategies for change
- B. Dealing with resistance
- C. Identifying forces for and against change in an organization

Objectives

1. To provide tools for determining change strategies
2. To make leaders and monitors aware of importance of internal diffusion

12:30-1:00 **Lunch**

1:00-2:30 **Discussion of Conflict**

- A. Group discussion of conflict situations which arose during previous year and ways to deal with these situations

Objectives

1. To provide knowledge of behavior alternatives to use when there is conflict in the group

	B. Presentation of possible strategies to deal with conflict that emerges in different stages of the change process	2. To provide concept of conflict emerging for different reasons at different stages of the change process 3. To provide understanding that some conflict is normal and not a reflection of poor leadership 4. To provide understanding that group can continue to function even when there is conflict
2:30-3:00	Exchange of Experiences between Leaders and Monitors from Different Schools[1]	Objectives
	A. Small groups of individuals discussed program in their schools	1. To provide leaders and monitors a chance to discuss problems and share ideas informally
	B. N.U. trainers had opportunity to deal with questions which individuals had concerning their own situations	2. To provide trainers a chance to deal with situation-specific questions without taking time of entire group
3:00-3:30	Outline of Program Time Table for the 1975-76 School Year	

Summary of Training

The third day provided an opportunity to cover those areas which emerged in the interviews as needing more work. The format was largely discussion interspersed with short presentations. Continuing leaders and monitors offered experiences and suggestions pertinent to all the topics covered, which served as a focus for discussion.

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[1] This activity was at the request of the participants, who felt they would like to know more about how the program was functioning in the other schools.

We did not systematically evaluate this second year training as we had done in the first year. Our observations, however, are that training leaders and monitors together was helpful. In one elementary school (School E) where there was turnover of both leader and monitor from the first to the second year, it became quite obvious that their subsequent "team approach" to program implementation the second year contributed significantly to their ability to handle a difficult situation. Other ramifications of the joint training were less striking. One important general result was an increase in the mutual agreement about leader and monitor roles between which we urged less differentiation. Another general result was that second year training combined with the experiences of the first year was able to greatly clarify many of the ambiguities of the program.

The reader will find that many of the adjustments in the program made possible by the second year training are evident in the case histories of the individual schools presented in Chapter Seven.

Summary

The present chapter has thus outlined the training components and the start-up of the intervention. While the initial training for program leaders and monitors was deficient, the revised training was expanded to provide more in-depth training. However, we would still conclude that the training for the program leaders and monitors was too short. Ideally, it should be expanded to five days.

Evaluation of the start-up of the first year indicated that while problems occurred, the OD project was having an impact in the participating schools. The next chapter provides an in-depth summative evaluation of the effects of the program.

CHAPTER SIX

SUMMATIVE EVALUATION OF THE INTERVENTION

Introduction

This chapter will present the global overview of the impact of the OD program on those schools that participated in the intervention. It will compare the participating and non-participating schools as two groups to see what differences exist over the duration of the OD program on both the School Survey questionnaire and the evaluation questionnaire. The next chapter will then provide an in-depth series of case analyses of each of the schools that participated in the OD project to see what impact the program had in each specific school.

This chapter will be organized as follows: first, a brief discussion of the data analysis techniques used will be presented; second, we will discuss the results of the intervention as measured by the evaluation questionnaire data; third, we will discuss the impact of the OD program on the data in the School Survey questionnaire; and fourth, we will summarize the results of the interviews that were conducted with teachers, principals, and district office personnel at the end of the OD project in May and June of 1976.

Data Analysis Techniques

In this section we discuss the procedures we have used in our present analysis of the summative results. The analyses we have used are straightforward and widely understood. We have avoided the use of overly sophisticated and overly complex analytic procedures such as path analysis, discriminant analysis, cross-lagged panel analysis, and various other multivariate approaches. To use these approaches not only would have tripled the length of this report but also would have been woefully premature and quite inappropriate to the level of sophistication represented in our present working hypotheses.

The data analysis done here was performed basically to establish a pattern of results. The hypotheses amount to a prediction of the pattern. The framework established by this pattern sets the stage for the formative evaluation, which we consider to be a primary focus, with at least equal importance to summative evaluation.

This section is presented in three parts: (1) an explanation of the statistical tests used, (2) a discussion of the samples on which and the levels of analysis at which the statistics are computed, and (3) a discussion of the threats to validity not removed by our procedures.

Statistical Tests

We use two major statistical tests: (1) t-tests between pre-test and post-test means for the separate samples or groups and (2) two-way analysis of variance (ANOVA) testing for an interaction effect between change over time and participation in the program.

T-tests. Of primary concern is whether or not the schools which participated in the program registered any change on the various organizational measures from the beginning to the end of the program. This is most straightforwardly gauged by using a t-test, which reveals whether or not any difference in variable means from time 1 to time 2 has a very small probability ($p \leq .05$) of happening by chance. When the probability is less than five percent that the change would have occurred by chance, we tend to accept the data as revealing a real change. Means for the non-participating schools are similarly compared by t-tests. To the extent that other factors remained somewhat constant over the duration of the intervention, we expect that few of these t-tests will reveal significant changes in organization functioning for the non-participating schools.

Analysis of variance. It was established in Chapter Four that both groups of schools were, indeed, not equivalent at the beginning of the intervention. This appears to be because of self-selection rather than random selection of the experimental and control groups. This non-equivalency makes it difficult to unambiguously compare changes over time between the two groups. If we compare the two groups on a long list of variables and discover that participating schools predominantly exhibit significant changes between pre and post-tests while non-participating schools exhibit very few (chance expectations would be one out of twenty), then we will probably feel relatively secure in saying that something is happening in the participating schools which is not in the non-participating. But what about each variable? How can we be somewhat assured that on any single variable both groups are not changing in the same way except that, by chance, participating school changes were large enough to achieve significance with a t-test while non-participating school changes did not quite achieve significance? This is especially hard to answer when the groups are not equivalent at pre-test.

We have taken Nunnally's (1975) advice and utilized a two-way ANOVA to help answer this question. Figure 6.1 illustrates graphically the pattern of change revealed for a hypothetical, but typical, variable. The value of the variable increases from pre to post-test for both groups. Furthermore, let us assume that this increase is large enough to achieve significance between pre and post-test means for the participating group. How can we be reasonably assured that the degree of change for the participating groups is also

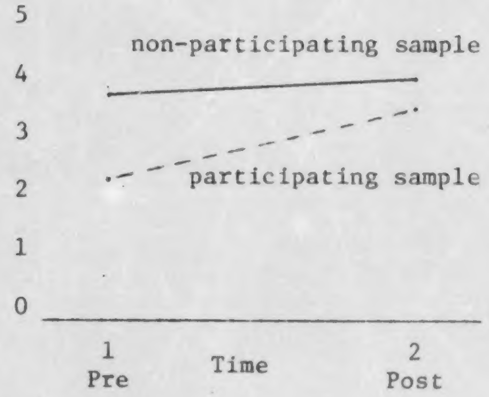

Figure 6.1. Pattern of change for hypothetical variable.

significantly different from the degree of change for the non-participating group? The interaction effect revealed by a two-way ANOVA with time and participation as the independent factors and the variable as dependent will answer this question. Time has two levels: pre and post. Participation has two levels: participating and non-participating. The presence of a significant interaction effect reveals that over time the differences between the two groups changed substantially--beyond anything reasonably expected by chance (i.e., $p \leq .05$). Equivalently, it reveals that the degree of change differs substantially between groups. The presence of an interaction effect between time and participation on the means of a particular variable gives us reasonable assurance that, during the intervention, "something" happened differently in participating schools than in non-participating schools. Whether or not that "something" was the intervention will be discussed later.

All statistical analyses in this report were performed using the SPSS package of programs (Nie *et al.*, 1975).

Levels of Analysis

One must determine the appropriate level of analysis when conducting statistical tests of significance. Appropriateness depends upon purpose. We have a choice between two levels of statistical analysis: the individual and the organization (school). The arguments for and against each are presented next.

The organization (school) level of analysis. The OD program itself can most legitimately be considered a school level treatment. The primary objective of the program is to increase the school's problem-solving capacity. In this sense, we must therefore consider the school to be the appropriate level of analysis. The effects of the intervention and the tests of the hypotheses should be investigated at this level. Since our questionnaire measures are, by definition, gathered at the individual level of analysis, we must initially aggregate these results to achieve an organization score on the variable of interest. The aggregative index we use for the value of organization level variables is the mean of individual responses to that variable. When the construct being measured is a true organization level concept such as standardization--i.e., where the referent is the organization as a whole--the mean probably offers a relatively valid measure of that construct. Where the construct being measured is individual in nature, such as satisfaction--i.e., where the referent is the respondent--the mean is a population estimate. As such, we may lose important information about the distribution of satisfaction within the organization when it is aggregated to the organization level.

There can be no argument that, in general, with the possible exception occurring when we investigate individual level effects, the organization level of analysis is the appropriate one to test our hypotheses based on an organization level program in which schools and not people were sampled. The drawbacks to this level of analysis mainly occur due to the size of our sample. All of our comparisons are done with elementary schools only, with eight in the participating group and eight in the non-participating group. The small N severely attenuates the significance of our findings. In the t-tests, this problem is not overly problematic because we are able to use "correlated" or "paired" t-tests when comparing our samples at pre-test with the same sample at post-test. This, coupled with the reduction in variance and increased precision which occurs when we aggregate to the organization level, still allows for fairly sensitive t-tests. In the ANOVA's, however, schools can not be paired and the small N makes it exceedingly difficult to find significant interactions.

The individual level of analysis. As stated above, to the extent that our study is a quasi-experiment to validate a theoretically based OD program design and to verify the hypotheses stemming from the theory, then the organization-level analyses are appropriate. However, it is also clear, both from the purpose stated in our original proposal to NIE and in the basic issues which we confront in this report, especially in the formative evaluation sections, that the major purpose of this research was not a quasi-experimental verification of hypotheses (that was done in the earlier study by Coughlan et al., 1972). Rather, the purpose was to evaluate, in a more informationally rich way, the process by which intervention activities were transformed into changes in organizational functioning. From the evaluation perspective, the issue is not to seek verification with minimal threats to validity, but to use as much information as possible to uncover the dynamics and relationships which may subtly be at work to significantly affect the program. In this spirit it seems legitimate to use the individual level of analysis as a way of increasing the sensitivity of statistical analyses for uncovering important relationships. In addition, we must remember that many of our variables, such as satisfaction, role ambiguity, and many others, are individual level constructs.

We report all our statistical analyses in this chapter at both the individual and organization levels of analyses. Purely for the sake of simplicity we have, in the various tables, presented only the means used in individual level analyses. In point of fact, these are quite close to the means used for organization level analyses. The differences between individual sample means and organization sample means are due to certain missing value conventions used in aggregation and the problem of unequal weightings of schools at the individual level due to differences in the number of respondents representing each school. The effect of these unequal weightings appears to be minimal, as the reader will see later in this chapter. In general, most t-tests which are significant when done at the individual level also achieve significance at the organization level. In fact, one measure, Cohesiveness, is significant at the organization level and not at the individual level. As mentioned earlier, the ANOVA's generally did not achieve significance at the organization level.

Since high schools and junior high schools are qualitatively, quantitatively, and organizationally very much different from elementary schools, and since only one secondary school participated in the program, we omitted these schools from our analyses in this chapter. We focus solely on elementary schools. One non-participating elementary school was omitted from the analyses because of a very low response rate on the questionnaire. Thus, eight participating and eight non-participating schools are used in the organization level samples. Only the respondents from each of these two sets of eight schools were used as the individual level samples.

As a final measure to ensure a relatively straightforward presentation we have limited the content of our discussion to individual level results. In almost all cases, the comments are valid for organization level results, also.

Threats to Validity

There are two additional validity issues which have little to do with the level of analysis issue. The first has to do with the assumptions of what time and participation status stand for in the analyses. The second has to do with the "regression to the mean" phenomenon.

Time x participation status. All the variable measures have been grouped in two ways: (1) pre-test or post-test (time) and (2) participating or non-participating. The underlying assumption in both cases is that the criteria for grouping measures are proxy for some other phenomena of more central interest. Participation status, for instance, we have assumed to stand for either the experimental manipulation or a non-manipulation. Time we have assumed to be a proxy for the process by which the manipulation actually occurs and affects the organization functioning.

Neither of these proxy assumptions need be true. Time, for instance, may be too short or too long to adequately reflect the implementation process. More importantly, other things, not the intervention, may be occurring in the district to affect these two groups of schools over time. We have already discussed at length how self-selection of the samples into participation status probably created other criteria, besides program implementation, by which the two groups of schools differ. Because of the possibility that both time and participation status are proxy for several other factors, we can not be sure that any of our tests do indeed measure program effects. Alternative explanations do seem unlikely in most cases, however, and we feel relatively confident that the data which we report in this chapter, if not artifacts of the sampling procedure, are relatively valid. Formative evaluation in subsequent chapters further bolsters our confidence that our data to some extent reflect program impact.

Regression to the mean. Cook and Campbell (1976) point out that the results shown in Figure 6.1, and typical of the results to be reported in this chapter, easily lend themselves to being explained by regression to the mean. This would be especially true when the experimental (or participating) group is chosen because of its low pre-test scores. Cooke and Campbell go on to say, however, that this regression artifact is less a threat if it can be assumed that the participating schools have achieved a relatively "stable pattern of poorer performance" (1976, p. 253). Our formative evaluation in later chapters reveals that such an assumption is very reasonable in our case. But the comparison between the participating and non-participating schools in Chapter Four also reveals that the participating schools are not extremely poor performing schools. On the average, they score lower than the other schools but nevertheless exhibit a wide range on pre-test measures which considerably overlaps the range exhibited by the non-participating group.

In general, we must say that while regression to the mean is a possible threat to the validity of the findings in this chapter, the threat is reduced by: (1) the fact that relative patterns of organization functioning appear to have been stable over time, and (2) the fact that participating schools, while performing below the other group on the average, were not extremely poorly functioning schools. Nevertheless, we acknowledge the problem that results on some variables appear to be best explained by the regression phenomenon, while results on others appear to be valid effects of the intervention. Final evidence on this and other issues would depend on additional waves of data, to establish the "lasting power" of upward trends in the participating schools. For now, a studied consideration of the various sources of information reported in this document will probably lead the reader to his or her own conclusions on the difficult matter of interpretation of the quantitative results.

Evaluation Questionnaire Data

Introduction

In Chapter One, we discussed the open systems model of the school organization that was the basis of the evaluation questionnaire (Figure 6.2). This model focuses on six sets of organizational variables (Environmental Influence, Organizational Structure, Participation in Decision Making, Organizational Process--Seven-stage Problem-solving Process, Resource Allocation Patterns, and Organizational Effectiveness). In this section we will discuss the impact of the OD program on these variables.

In Chapter One, it was indicated that there were certain variables in the systems model of the school organization on which the OD program would have a direct or immediate impact and other variables on which the intervention was predicted to have an indirect effect. By direct effects it is meant that during the two-year duration of the intervention those particular variables should change because they are the primary targets of the OD program activities. For example, given that the OD intervention focuses on problem identification and problem-solving activities, it would be expected that the seven-stage problem-solving process variables would improve from pre-test to post-test

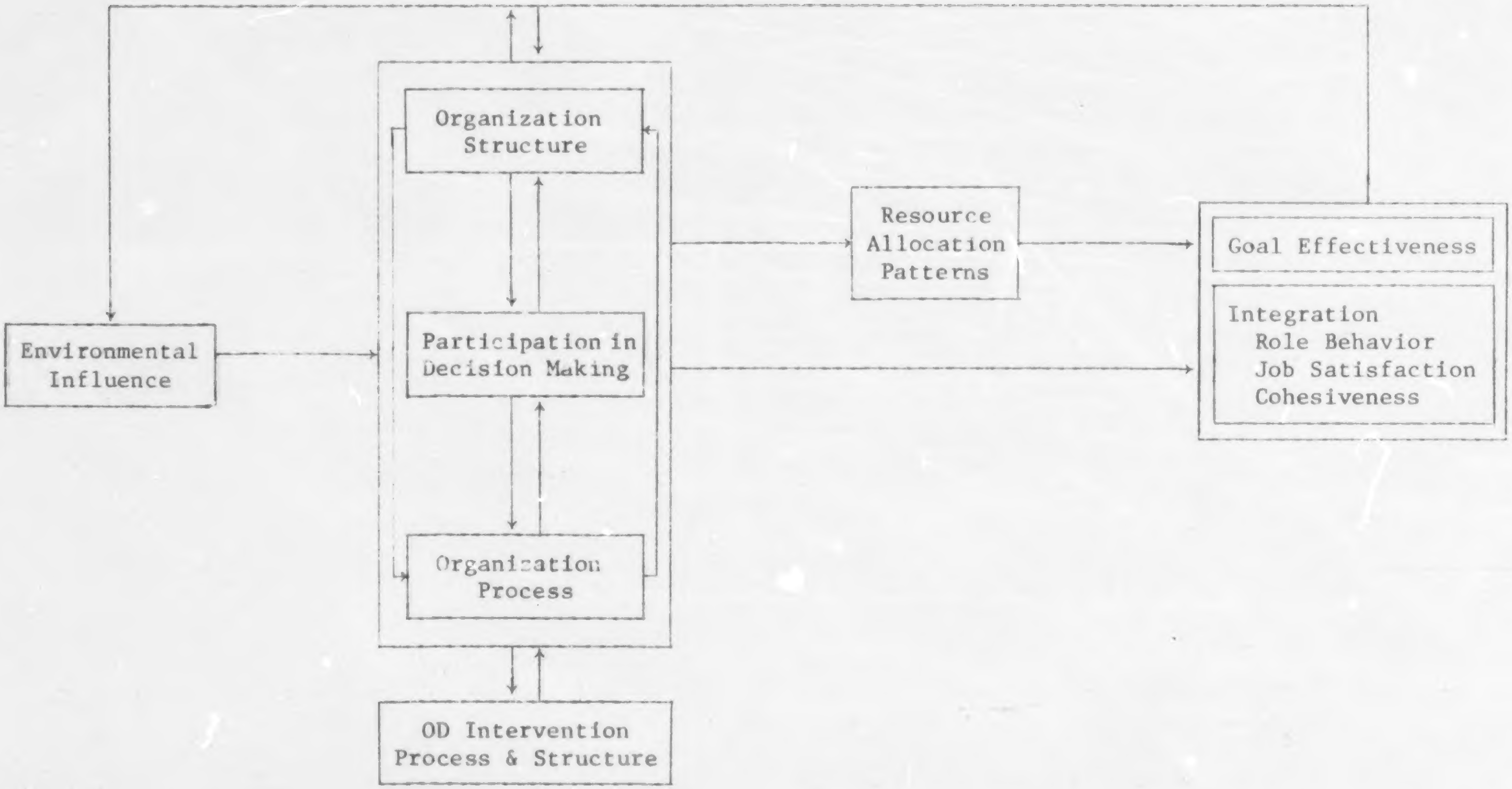
Organization Structure
Participation in Decision Making
Organization Process
Environmental Influence
Resource Allocation Patterns
Goal Effectiveness
Integration
Role Behavior
Job Satisfaction
Cohesiveness
OD Intervention Process & Structure

Figure 6.2. Open systems model of the organization and the intervention.

measures. By indirect effects it is meant that change is predicted as a consequence of the direct effects and therefore as an indirect consequence of the OD program. The causal link is more tenuous as it is open to much more interference from other variables and is temporally as well as causally more distant from the independent variable. It may be that on these variables the impact of the OD program might not be exhibited during the period of the intervention. Also, whereas change in certain variables might be expected, it is sometimes difficult to predict the nature of that change. For example, it is unclear just what impact the OD program would have on the resource allocation process as the program, with its emphasis on problem identification and solving, is not geared directly to focus on these matters. We can, however, anticipate that there will be a change and in this case we have hypothesized a general upward direction for the expected change, although not the particular goals which will receive an increase in resources.

General hypothesis. The general hypothesis for the impact of the OD intervention on the variables in the systems model at the school organization (evaluation questionnaire) is as follows:

> The OD program is predicted to have a direct effect on the organization structure, seven-stage problem-solving process and participation in decision-making variables in schools that participated in the program. Indirect effects are predicted on resource allocation, organizational effectiveness, and environmental influence.

Direct Effects on Evaluation Data of Participation in the OD Program

Specific direct effects of participation in the OD program are predicted on Organization Structure, Seven-stage Problem-solving Process, and Participation in Decision Making variables. The summary data comparing pre-intervention and post-intervention measures between those schools participating and not participating in the OD program are presented in Table 6.1.

Table 6.1

Changes over Time on Evaluation Questionnaire Scales: Significant Changes for Participating and Non-participating Samples (t-tests) and Significant Interaction Effects between Change and Program Participation (two-way ANOVA's) Individual and Organization Level Analyses

	Participating Samples					Individual Level Interaction Effect (time x participation)[3]	Non-participating Samples				
	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind}[1] (N=120)	t_{org}[2] (N=8)		$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind}[1] (N=100)	t_{org}[2] (N=8)
Environment											
Environmental influence on policy and programs											
Students	2.38	3.08	+	-4.40^{***}	-6.80^{***}		2.54	2.79	+		
Teachers	3.26	3.57	+	-2.92^{**}	-2.83^{*}		3.44	3.44	-		
Principals	4.04	4.09	+				4.12	4.05	-		
Central office	4.34	4.43	+				4.19	4.28	+		
Board of education	4.44	4.26	-				4.23	4.31	+		
Parents	3.08	3.17	+				2.94	3.02	+		
The AFT and affiliates	3.14	3.09	-				2.91	3.03	+		
State government	3.15	3.92	+	-5.81^{***}	-3.96^{**}		3.06	3.69	+	-4.25^{***}	-5.26^{***}
Federal government	3.06	3.73	+	-5.02^{***}	-3.42^{**}		3.08	3.61	+	-3.57^{***}	-4.70^{**}
Community agencies (police, fire, etc.)	2.32	2.56	+	-2.22^{*}			2.13	2.28	+		
Organization Structure											
Standardization	4.17	4.37	+	-2.17^{*}			4.17	4.23	+		
Autonomy	4.16	4.25	+				4.20	4.28	+		
Variety	4.02	4.31	+	-2.47^{*}	-2.58^{*}		4.26	4.18	-		
Hierarchy of authority	3.45	3.38	-				3.02	3.15	+		
Organizational Process											
Problem-solving process											
Evaluation	3.10	3.81	+	-5.28^{***}	-5.58^{***}	*	3.60	3.82	+		
Solution generation	3.19	3.78	+	-4.86^{***}	-5.30^{***}	*	3.69	3.80	+		
Internal diffusion	2.51	2.94	+	-3.72^{***}	-2.64^{*}		2.80	2.88	+		
Legitimation	2.50	2.90	+	-3.13^{**}	-3.16^{*}		2.72	2.96	+		
Adoption	2.79	3.19	+	-3.41^{***}	-3.92^{**}		3.27	3.33	+		
Implementation	3.20	3.71	+	-4.18^{***}	-3.70^{**}	*	3.59	3.68	+		
Routinization	3.22	3.65	+	-4.18^{***}	-2.90^{*}	*	3.69	3.75	+		
Participation in decision making											
Actual participation in policy decisions	1.52	1.59	+			*a	1.65	1.48	-	2.03^{*}	
Should participate in policy decisions	3.04	3.02	-				3.03	2.98	-		
Actual participation in operational decisions	3.39	3.54	+			*	3.49	3.46	-		
Should participate in operational decisions	4.29	4.30	+				4.28	4.29	+		

Table 6.1 (continued)

Resource Allocation Process	Participating Samples $\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=120)	t_{org} (N=8)	Individual Level interaction Effect (time x participation)	Non-participating Samples $\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
Amount of attention and resources											
1. Develop highly qualified staff	3.36	3.67	+	-2.76**			3.61	3.66	+		
2. Implement comprehensive and integrated instructional program	3.33	3.73	+	-3.97***	-4.22**		3.47	3.74	+	-2.17*	-3.63**
3. To provide positive and supportive school environment	3.42	3.75	+	-3.17**	-4.44**		3.69	3.81	+		
4. To provide ongoing evaluation of school programs for modification and development	2.88	3.39	+	-4.72***	-6.22***		3.11	3.37	+	-1.84	
5. To experiment with educational innovations	3.09	3.08	-				3.31	3.28	-		
6. To be responsive to community	3.04	3.43	+	-3.81***	-4.66**	*	3.43	3.44	+		
7. To communicate to public objectives and results of school programs	2.72	3.07	+	-3.15**	-5.04**	*	3.18	3.16	-		
8. To promote educational achievement of minority students	3.27	3.55	+	-2.08*	-4.84**		3.51	3.72	+		
9. To coordinate school activities with relevant community groups	2.73	2.84	+				2.90	2.89	-		
10. To lessen disciplinary problems	3.37	3.49	+				3.42	3.54	+		
Organizational Effectiveness											
Goal effectiveness											
1. Develop highly qualified staff	3.29	3.50	+				3.56	3.51	-		
2. Implement comprehensive and integrated instructional program	3.16	3.37	+	-2.04*			3.37	3.42	+		
3. To provide positive and supportive school environment	3.28	3.47	+				3.51	3.65	+		
4. To provide ongoing evaluation of school programs for modification and development	2.76	3.10	+	-3.15**	-5.76***		3.04	3.05	+		
5. To experiment with educational innovations	2.96	2.89	-				3.13	3.07	-		
6. To be responsive to community	2.87	3.20	+	-3.22***	-2.64*	*	3.20	3.22	+		
7. To communicate to public objectives and results of school programs	2.69	2.99	+	-2.99**	-5.27***	*	3.04	2.98	-		
8. To promote educational achievement of minority students	2.90	3.11	+				3.25	3.32	+		
9. To coordinate school activities with relevant community groups	2.81	2.81	+				2.86	2.90	+		
10. To lessen disciplinary problems	3.05	3.09	+				2.98	2.94	-		

Table 6.1 (continued)

Integration	Participating Samples $\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=120)	t_{org} (N=8)	Individual Level Interaction Effect (time x participation)	Non-participating Samples $\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
Role behavior											
Role overload	3.07	3.10	[illegible]				3.16	3.30	+		
Role ambiguity	2.45	2.29	[illegible]	[illegible].15*			2.28	2.21	-		
Job satisfaction											
Intrinsic satisfaction	4.50	4.82	+	-2.95**	-3.19*	*	4.76	4.66	-		
Contextual satisfaction	4.10	4.50	+	-3.44***	-3.92**		4.41	4.54	+		
Cohesiveness	4.56	4.75	+				4.85	4.69	-		

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*Significant at $p < .05$.

**Significant at $p < .01$.

***Significant at $p < .001$.

[a] Significant interaction effect at organizational level.

[1] Two-tailed t-test, between pre-test and post-test groups.

[2] Two-tailed t-test, using paired groupings.

[3] F statistic used to determine the probability that measured interactions occur by chance.

Organization Structure. The specific hypothesis regarding Organization Structure is as follows:

H10:[1] The intervention will affect the organization structure. Specifically, it is predicted that participation in the intervention will result in teachers perceiving:
a) no change in autonomy
b) an increase in standardization
c) an increase in variety
d) a decrease in hierarchy of authority.

There was no significant difference between the participating and non-participating schools on any of the structural measures at time 1.

The data in Table 6.1 indicate that in the participating schools scores were significantly higher after the intervention (post-test) for Standardization ($p < .031$) and Variety ($p < .014$). There were no significant changes on the variables in the non-participating schools. It appears, then, that in the participating schools there is a perception on the part of teachers that there are more clear-cut procedures and mechanisms (standardization) for getting things done after the intervention than before. This is not surprising as the OD program focuses on developing a supplementary decision-making process with rules, procedures, and other mechanisms.

Increased perceptions of variety by teachers in the participating schools indicate that participants see their job as being less routine than before the OD program. Again, the increased number of activities teachers are involved with as a result of their participation in the Program Groups may lead to this increase. This result is especially significant in that during the duration of the intervention there was a slight non-significant decline in the perception of variety by teachers in the non-participating schools.

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[1] Hypotheses are numbered in this chapter to correspond to the original presentation in Chapter Three.

The data in Table 6.1 also indicate non-significant changes in the perceptions of autonomy and hierarchy of authority by teachers in the participating schools in the predicted directions. Teachers' perceptions of more autonomy may be due to the fact that they are having more to say in their schools as a result of participation in their Program Groups. This greater participation may then lead to a feeling of more control and thus more autonomy in doing their job. While not significant, teachers also indicated that they felt the hierarchy of authority declined somewhat in the participating schools during the course of the intervention, while teachers in non-participating schools indicated a slight, non-significant increase. The slight decline in hierarchy in the participating schools may again be due to the OD program. By being more involved in problem-solving activities, teachers may feel more involved and sharing in the power and influence in their schools. It may also reflect a change in behavior by principals in these schools.

While there is an interpretable and predicted pattern to the changes in Organization Structure when the t-tests are considered, the two-way ANOVA failed to yield an interaction effect. It should be pointed out that at the time of post-test questionnaire administration, the structural components of the OD program had terminated in three participating schools, and it was not until several months later that the faculty in several other schools determined that these components would indeed be ongoing in their schools. Thus, program effect on perceptions of structure may not yet have been fully felt.

Organization Problem-solving Process. The specific hypothesis here is:

H11: The intervention will affect organization processes. Specifically, it is predicted that participation in the intervention will result in teachers perceiving an increase in the degree to which the following subprocesses of problem solving occur:
a) evalution activities
b) solution generation activities

c) internal diffusion activites
d) legitimation activities
e) adoption activities
f) implementation activities
g) routinization activities.

The data comparing changes in the Problem-solving Process variables across the duration of the intervention for participating and non-participating schools are presented again in Table 6.2.

The results of the t-tests reported in Table 6.2 indicate that there were significant changes in the predicted direction in the participating schools. The teachers in these schools perceived more capability in: (1) Evaluation ($p < .0001$)--problem identification; (2) Solution Generation ($p < .0001$)--the formulation of solutions to identified problems; (3) Internal Diffusion ($p < .0001$)--the communication of problem solutions throughout the school system to those affected; (4) Legitimation ($p < .002$)--obtaining sanction for problem solutions; (5) Adoption ($p < .001$)--acceptance of problem solutions; (6) Implementation ($p < .0001$)--the installation of the problem solution into the ongoing activities of the school system; and (7) Routinization ($p < .001$)--merging the solution with existing organizational rules and procedures.

The significant impact of the OD program on the Problem-solving Process variables is also reflected in the data in Table 6.2 by the significant analysis of variance interactions (participation x time) for Evaluation, Solution Generation, Implementation, and Routinization. It is not surprising that the OD program should have its greatest impact on these four components of the seven-stage problem-solving process. The OD program, through the survey feedback, focuses on the identification of school organizational problems (evaluation). The training of the program leaders and the components of the program itself emphasize the importance of generating problem solutions

Table 6.2

Changes over Time on Problem-solving Process Scales

Participating Samples	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=120)	t_{org} (N=8)	Individual Level Interaction Effect (time x participation)
Problem-solving process						
Evaluation	3.10	3.81	+	-5.28^{***}	-5.58^{***}	*
Solution generation	3.19	3.78	+	-4.86^{***}	-5.30^{***}	*
Internal diffusion	2.51	2.94	+	-3.72^{***}	-2.64^{*}	
Legitimation	2.50	2.90	+	-3.13^{**}	-3.16^{*}	
Adoption	2.79	3.19	+	-3.41^{***}	-3.92^{**}	
Implementation	3.20	3.71	+	-4.18^{***}	-3.70^{**}	*
Routinization	3.22	3.65	+	-4.18^{***}	-2.90^{*}	*

Non-participating Samples	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
Problem-solving process					
Evaluation	3.60	3.82	+		
Solution generation	3.69	3.80	+		
Internal diffusion	2.80	2.88	+		
Legitimation	2.72	2.96	+		
Adoption	3.27	3.33	+		
Implementation	3.59	3.68	+		
Routinization	3.69	3.75	+		

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*Significant at $p < .05$.

**Significant at $p < .01$.

***Significant at $p < .001$.

(solution generation). The program emphasizes strongly that it is not enough to just identify problems--constructive solutions have to be generated Once solutions are generated, it then becomes important that they become integrated into the ongoing functioning of the organization. The OD program, through training and documentation, emphasizes both implementation and routinization. As will be mentioned in later chapters, we discovered through the experiences of various schools that we had not provided adequate tools for internal diffusion. Nor did we emphasize adoption to a very great degree. We did, however, both structurally and through training, emphasize the legitimation stage. Lack of significant interaction here may well indicate a poor measure of that stage.

The data in Table 6.2 indicate that there were no significant changes during the program in the Problem-solving Process in the non-participating schools. These schools were intially higher than the participating schools on all seven stages, but post-test scores indicate that the two groups were approximately equal.

In summary, the data indicate that among teachers in schools participating in the OD program there was perception of improvement in the problem-solving process. Significant improvement was not present in the non-participating sample.

Participation in Decision-making Process. In Chapter One, it was indicated that the OD program was predicted to directly affect teachers' perceptions of their participation in decision making in their schools. Consistent with Alluto and Belasco's (1972, 1973) work, twelve areas of decision making were identified. Teachers were asked to indicate the extent to which they actually and should participate in these areas. Factor analysis reduced these twelve decision areas to two components--Policy Decisions and Operational Decisions. Policy Decisions focused on broad school issues which are traditionally decided at the managerial level--budgets, professional assignments, salaries, etc.. Operational Decisions focused on issues more related to the teacher's day-to-day functioning in the school--selecting texts, resolving learning problems of students, dealing with classroom discipline problems, etc..

The OD intervention had the intent of getting teachers more involved in the problem-solving process through their participation in Program Groups. It thus would be expected that this would also lead them to feel more involved in decision-making activities. The hypothesis is as follows:

> H12: The intervention will affect the degree of participation in decison making. Specifically, it is predicted that participation in the intervention will result in an increase in teachers' perceptions of their degree of participation in decision making.

The data on Participation in Decision Making are presented in Table 6.3. At time 1, there was no significant difference between participating and non-participating schools on any of these variables. The data present weak evidence that there were effects due to participation in the OD program for perceptions of actual participation in policy decisions and actual participation in operational decisions.

In the participating schools, a very slight increase in perceptions of actual participation in policy decisions was coupled with a significant decrease in non-participating schools ($p < .04$) to produce a significant ($p < .05$) two-way interaction effect (time x participation) in the analysis of variance. In the case of operational decisions, the increase in perceptions of actual participation by teachers in participating schools approached significance

Table 6.3

Changes over Time on Participation in Decision-making Scales

Participating Samples	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=120)	t_{org} (N=8)	Individual Level Interaction Effect (time x participation)
Participation in decision making						
Actual participation in policy decisions	1.52	1.59	+			*a
Should participate in policy decisions	3.04	3.02	-			
Actual participation in operational decisions	3.39	3.54	+			*
Should participate in operational decisions	4.29	4.30	+			

Non-participating Samples	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
Participation in decision making					
Actual participation in policy decisions	1.65	1.48	-	2.03*	
Should participate in policy decisions	3.03	2.98	-		
Actual participation in operational decisions	3.49	3.46	-		
Should participate in operational decisions	4.28	4.29	+		

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*Significant at $p < .05$.

**Significant at $p < .01$.

***Significant at $p < .001$.

[a] Significant interaction effect at organizational level.

($p < .08$), and when coupled with a small decrease in non-participating schools, the two-way interaction was again significant ($p < .05$). In general, there was an increase in perceptions of participation in decision making in participating schools, especially in operational decisions. Program Groups did not concentrate on policy decision areas, so the weaker increase in those decisions is not surprising. There was a general decrease in perceptions of participation in non-participating schools, particularly in policy decisions. This may simply be a regression to the mean, or it may reflect the changeover in administration at the district level. The OD program may have buffered the teachers in the participating schools from feeling disenfranchised during the period of uncertainty which accompanies a change in leadership.

The data in Table 6.3 also indicate another interesting finding regarding teachers' perceptions of how much they should participate in the two decision-making areas. The data indicate that as a result of participation in the OD intervention, teachers did not feel they should be more involved in decision making. In fact, these measures were remarkably constant in both groups of schools. The finding that teachers' expectations regarding how much they should participate in decisions did not change has an important implication for OD efforts. Before the program began, many critics in the district felt that if teachers were involved in the program they would have their expectations raised about involvement, and this would result in their feeling that they should be more involved in decision making. The data indicate that this in fact did not happen. This may be partially due to the fact that during training sessions with program leaders and monitors a strong emphasis was placed on directing their Program Groups to work in areas and problems they had control over in their buildings, rather than trying to get more involved in broad decison-making areas. It may be that the increased communication between teachers, principals, and district central office staff, as a result of the OD program, resulted in teachers feeling their inputs were being heard by the power structure in the system and thus there was no need for more involvement in the actual decision-making process.

Indirect Effects on Evaluation Data of Participation in the OD Program

As indicated earlier, the OD intervention focused primarily on the structure and process of the school organization itself. It is predicted, as reflected in Figure 6.1, that changes in the structure and process of the school organization will eventually result in changes in the various types of organizational outcomes and, by way of feedback loops, eventually result in changes in environmental influence. These changes, while due to the intervention, are one or more steps removed from the changes directly made by the OD program. Therefore, we have classified them as "indirect" effects occurring by way of the direct changes made in the school organization's structure and process.

Resource Allocation. If the total amount of resources or emphasis placed on a given set of school goals or objectives is constant, then change in resource allocation would mean a change in the pattern by which resources are parceled out among the goals, and not a change in total resources. However, the assumption is made here that there exists a considerable amount of available resources or emphasis which is not being applied to school goals and that changes in resource allocation could mean a total increase in resources and emphasis toward a set of school goals. It is also expected that this total increase will also be parceled out differentially among the possible school goals to reflect the values emphasized by teachers. The specific hypothesis here is as follows:

> H13: It is predicted that participation in the intervention will result in an increase in teachers' perceptions of resources allocated and emphasis applied to school goals.

The data in Table 6.4 present the teachers' perceptions of the resources allocated to the ten school goals. The data indicate that teachers in the schools participating in the OD program perceived after the OD intervention that more resources and attention were given to the following school goals:

1. Develop highly qualified staff ($p < .01$)
2. Implement a comprehensive and integrated instructional program ($p < .0001$)
3. To produce a positive and supportive school environment ($p < .002$)
4. To provide an ongoing evaluation of school programs for purposes of program modification and development ($p < .0001$)
6. To be responsive to the needs, concerns, and desires of the community ($p < .0001$) (There was also a significant [$p < .05$] two-way interaction effect [time x participation] in the ANOVA.)
7. To communicate to the public the objectives, operations, and results of the educational programs ($p < .002$) (Also a significant [$p < .05$] two-way interaction effect)
8. To promote educational achievement of minority students ($p < .04$)

Thus, the data indicate that in seven of the ten goals teachers in the participating schools perceived after the OD intervention that more resources were being allocated and more emphasis was being placed on them. This is as predicted from the hypothesized impact of participation in the OD program. While the effects are indirect, the impact of the OD program might be as follows. By being more involved in school affairs through their Program Groups, teachers are placing more emphasis and expending more resources to accomplish certain goals. In addition, they are communicating their concerns to their principals and in some cases right up the organizational hierarchy

Table 6.4

Changes over Time on Resource Allocation Items

Participating Samples	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=120)	t_{org} (N=8)	Individual Level Interaction Effect (time x participation)
Resource allocation process						
Amount of attention and resources						
1. Develop highly qualified staff	3.36	3.67	+	-2.76^{**}		
2. Implement comprehensive and integrated instructional program	3.33	3.73	+	-3.97^{***}	-4.22^{**}	
3. To provide positive and supportive school environment	3.42	3.75	+	-3.17^{**}	-4.44^{**}	
4. To provide ongoing evaluation of school programs for modification and development	2.88	3.39	+	-4.72^{***}	-6.22^{***}	
5. To experiment with educational innovations	3.09	3.08	-			
6. To be responsive to community	3.04	3.43	+	-3.81^{***}	-4.66^{**}	*
7. To communicate to public objectives and results of school programs	2.72	3.07	+	-3.15^{**}	-5.04^{**}	*
8. To promote educational achievement of minority students	3.27	3.55	+	-2.08^{*}	-4.84^{**}	
9. To coordinate school activities with relevant community groups	2.73	2.84	+			
10. To lessen disciplinary problems	3.37	3.49	+			

Table 6.4 (continued)

	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
Non-participating Samples					
Resource allocation process					
Amount of attention and resources					
1. Develop highly qualified staff	3.61	3.66	+		
2. Implement comprehensive and integrated instructional program	3.47	3.74	+	-2.17*	-3.63**
3. To provide positive and supportive school environment	3.69	3.81	+		
4. To provide ongoing evaluation of school programs for modification and development	3.11	3.37	+	-1.84	
5. To experiment with educational innovations	3.31	3.28	-		
6. To be responsive to community	3.43	3.44	+		
7. To communicate to public objectives and results of school programs	3.18	3.16	-		
8. To promote educational achievement of minority students	3.51	3.72	+		
9. To coordinate school activities with relevant community groups	2.90	2.89	-		
10. To lessen disciplinary problems	3.42	3.54	+		

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*Significant at $p < .05$.

**Significant at $p < .01$.

***Significant at $p < .001$.

to the district central office. This increase in participation and communication may lead teachers in the participating schools to feel that in fact more emphasis and resources are being placed on school-level goals. This explanation for the participating schools is enhanced by the fact that during the OD intervention there was only one goal--Implement a Comprehensive and Integrated Instructional Program ($p < .03$)--in which teachers in non-participating schools perceived a significant increase in resource allocation and emphasis. Table 6.4 indicates that there was even a slight non-significant decline in the resources allocated to three goals in the perceptions of teachers in non-participating schools. It should be pointed out that the participating schools were initially well below non-participating schools in the amount of resources and emphasis the teachers perceived to be given to many areas. The increase during the course of the intervention merely brought them closer to parity in most instances.

One of the most surprising results in assessing the impact of the OD intervention on resource allocation is the fact that there was no significant increase in the perception of resources allocated to and emphasis being placed on To Experiment with Educational Innovations. One would have expected that the OD program would have created more innovative behavior in the participating schools. It may be that the OD program results in teachers being more concerned with the functioning of their school in terms of problem solving and decision making. This focus on improving the functioning of the school has apparently been the first priority of the Program Groups. Once the schools have operated more effectively in terms of problem solving and decision making, the teachers may then become more concerned with experimenting with innovations.

Organizational Effectiveness. There are two components of teachers' perceptions of their schools' organizational effectiveness being examined here. These components are Goal Effectiveness and Integration.

Goal Effectiveness. The specific hypothesis with respect to the impact of the OD intervention on teacher perceptions of goal effectiveness is as follows:

> H14: It is predicted that participation in the intervention will result in an increase in the degree to which school goals are perceived as being achieved.

The data in Table 6.5 report teacher perceptions as to how effective they think their schools are in obtaining ten school goals. It can be seen in Table 6.5 that after the OD intervention teachers in the participating schools perceived an increase in goal effectiveness on four goals, while there were no significant changes during the duration of the OD program in the non-participating schools. Once again, improvements in participating schools tended to bring them up to the level of the non-participating schools rather than surpassing them.

In the participating schools, teachers perceived their schools after the OD intervention to be more effective in accomplishing the following goals:

2. To implement a comprehensive and integrated instructional program ($p < .04$)

4. To provide ongoing evaluation of school programs for purposes of program modification and development ($p < .002$)

6. To be responsive to the needs, concerns, and desires of the community ($p < .001$) (Also significant [$p < .05$] analysis of variance interaction effect between time and participation)

7. To communicate to the public the objectives, operations, and results of educational programs ($p < .003$) (Also significant [$p < .05$] analysis of variance interaction effect between time and participation)

An interesting result here is that those goal areas mentioned earlier as being perceived as having more resources allocated to them after the OD

Table 6.5

Changes over Time on Goal Effectiveness Items

Participating Samples	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=120)	t_{org} (N=8)	Individual Level Interaction Effect (time x participation)
Organizational Effectiveness						
Goal effectiveness						
1. Develop highly qualified staff	3.29	3.50	+			
2. Implement comprehensive and integrated instructional program	3.16	3.37	+	-2.04^{*}		
3. To provide positive and supportive school environment	3.28	3.47	+			
4. To provide ongoing evaluation of school programs for modification and development	2.76	3.10	+	-3.15^{**}	-5.76^{***}	
5. To experiment with educational innovations	2.96	2.89	-			
6. To be responsive to community	2.87	3.20	+	-3.22^{***}	-2.64^{*}	*
7. To communicate to public objectives and results of school programs	2.69	2.99	+	-2.99^{**}	-5.27^{***}	*
8. To promote educational achievement of minority students	2.90	3.11	+			
9. To coordinate school activities with relevant community groups	2.81	2.81	+			
10. To lessen disciplinary problems	3.05	3.09	+			

Table 6.5 (continued)

	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
Non-participating Samples					
Organizational effectiveness					
Goal effectiveness					
1. Develop highly qualified staff	3.56	3.51	-		
2. Implement comprehensive and integrated instructional program	3.37	3.42	+		
3. To provide positive and supportive school environment	3.51	3.65	+		
4. To provide ongoing evaluation of school programs for modification and development	3.04	3.05	+		
5. To experiment with educational innovations	3.13	3.07	-		
6. To be responsive to community	3.20	3.22	+		
7. To communicate to public objectives and results of school programs	3.04	2.98	-		
8. To promote educational achievement of minority students	3.25	3.32	+		
9. To coordinate school activities with relevant community groups	2.86	2.90	+		
10. To lessen disciplinary problems	2.98	2.94	-		

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*Significant at $p < .05$.

**Significant at $p < .01$.

***Significant at $p < .001$.

intervention were not all perceived here as being more effectively accomplished. Goals 2, 4, 6, and 7 mentioned above as perceived as more effectively accomplished were also ones to which teachers in the participating schools felt more resources were allocated and more emphasis was given.

Teachers in participating schools identified three other goals to which they felt more resources were allocated after the OD intervention. However, the teachers did not perceive that their schools had become more effective in accomplishing them. These goals were: Develop Highly Qualified Staff, Produce a Positive and Supportive School Environment, and Promote Educational Achievement of Minority Students.

The apparent "non-coupling" between the resources and emphasis on these goals and the effectiveness at accomplishing them can be explained in one or both of two ways. First, the time frame may have been too short to pick up the subsequent changes in effectiveness in these areas. Second, effective accomplishment in these areas may also be subject to forces not under the control of the school faculties. These external forces can serve to delay the impact of school emphasis on these issues or to negate faculty efforts altogether. Promoting the educational achievements of minority students, for instance, may well have been complicated by strong community activism in some schools and the threat of state-ordered desegregation of the district's schools.

In summary, there was some perceived improvement in goal effectiveness among teachers in the participating schools. Four of the ten goal areas improved. The reason why there was not greater perceived improvement in effectiveness may be due to the fact that there is a more long-term indirect effect between the OD program and improving goal effectiveness.

Integration. Integration is concerned with the psychological reactions individuals have with regard to their job and the role they occupy in the school organization. Integration as conceptualized in this study has three components: Job Satisfaction, Cohesiveness, and Well-defined Role Structure (i.e., low role ambiguity and role overload). Specifically, the hypothesis here is as follows:

H15: The intervention will result in a higher degree of integration of the individual teachers into their schools. Specifically, participation in the intervention will result in teachers perceiving:

a) higher satisfaction with the work itself (intrinsic satisfaction)
b) higher satisfaction with the work situation (contextual satisfaction)
c) lower role ambiguity
d) no change in role overload
e) higher cohesiveness.

At the onset of the OD intervention, the participating schools scored significantly lower than the non-participating schools in all integration measures except Role Overload.

The data in Table 6.6 indicate that there were some significant perceived changes in integration after the OD intervention in the participating schools while there were none in the non-participating schools. In fact, in the non-participating schools, while non-significant, three of the five measures of integration declined during the OD intervention.

In the participating schools, four of the five indicators of integration were in the predicted direction. Teachers perceived both more satisfaction with their work itself (Intrinsic Satisfaction, $p < .004$) and more satisfaction with their work situation (Contextual Satisfaction, $p < .001$) after the OD intervention. The two-way ANOVA showed a significant interaction effect ($p < .007$) between time and participation status on the Intrinsic Satisfaction variable. During the same time, the non-participating schools increased slightly in Contextual Satisfaction and decreased slightly in Intrinsic

Table 6.6

Changes over Time on Integration Scales

	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=120)	t_{org} (N=8)	Individual Level Interaction Effect (time x participation)
Participating Samples						
Integration						
Role behavior						
Role overload	3.07	3.10	+			
Role ambiguity	2.45	2.29	-	2.15*		
Job satisfaction						
Intrinsic satisfaction	4.50	4.82	+	-2.95**	-3.19*	*
Contextual satisfaction	4.10	4.50	+	-3.44***	-3.92**	
Cohesiveness	4.56	4.75	+			

	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
Non-participating Samples					
Integration					
Role behavior					
Role overload	3.16	3.30	+		
Role ambiguity	2.28	2.21	-		
Job satisfaction					
Intrinsic satisfaction	4.76	4.66	-		
Contextual satisfaction	4.41	4.54	+		
Cohesiveness	4.85	4.69	-		

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* Significant at $p < .05$.

** Significant at $p < .01$.

*** Significant at $p < .001$.

Satisfaction. Apparently, participation in the OD program and the Program Groups was making teachers enjoy their job more and feel more satisfied about the work setting. This may be due to their feeling that they have more to say about their jobs and feeling more involved in their schools as a result of their problem-solving activities.

The predictions with respect to role overload and role ambiguity also came out as expected in the participating schools. With their increased activities as a result of their participation in their Program Groups there was no increase in role overload after the OD intervention. This is an important finding in that some administrators in the district predicted that participation in the OD program would overload the teachers. After the OD intervention, teachers in the participating schools perceived less role ambiguity ($p < .033$). Apparently, participation in the Program Groups and teachers' increased interaction and communication with their principals and the district central office was helping them to better understand or define their role. This happened not only because of the increased information flow but also because the program itself clarified roles and provided a basis for negotiating role expectations.

The only surprising finding regarding integration is the lack of any significant increase after the intervention in teachers' perceptions of cohesiveness in the participating schools. The data in Table 6.6 do show a slight, non-significant improvement in Cohesiveness after the OD intervention in the participating schools while a slight, non-significant drop occurs in the non-participating schools. However, a more significant increase in Cohesiveness was expected in the schools in the OD program. Participation in the Program Groups increased interaction among teachers and increased their participation in problem-solving activities in their schools. It was expected that this increased involvement would lead to a feeling of more closeness with others in the school. It may be that this move toward increased cohesiveness takes more time to exhibit itself. For example, it may take two or more years before cohesiveness is increased as it takes some history of successful functioning of the Program Groups. It will become evident in the case studies that an initial impact of the OD program in some schools was to make conflict manifest within the faculty. Several schools were still dealing with this problem when our involvement terminated.

Environmental Influence. The most remote impact of the OD intervention was expected on these variables. Environmental Influence refers to teachers' perceptions regarding how much influence they perceive ten environmental factors to have over policies and procedures in their schools.

It was expected that teachers' perceptions of influence over policies and procedures would be altered in two ways. The program should affect the influence which teachers perceive school personnel at the building level to exert.

H16: The intervention will affect the influence of building level school personnel (internal environment) on policies and procedures. Specifically, it is predicted that participation in the intervention will result in teachers perceiving greater influence over school policies and programs for:
- a) teachers
- b) principals.

As problem solving is occurring at the building level, teachers in the participating schools will be better able to tailor their decisions to the needs of the immediate community and their students:

H17: The intervention will affect teachers' perceptions of external environmental influence patterns. Specifically, it is predicted that teachers will perceive the following groups to have increased influence over school policies and programs:
- a) students
- b) parents.

The data in Table 6.7 indicate that in those schools participating in the OD intervention teachers perceived significantly more influence exerted by students ($p < .0001$), teachers ($p < .004$), state government agencies ($p < .0001$), federal government agencies ($p < .0001$), and community agencies ($p < .028$) after the OD intervention. The significant increases for teachers and students after the intervention is as predicted. The increase in perceived influence on policies and programs of state and federal government agencies after the intervention in both the participating and non-participating schools is probably due to the well-publicized pressure these agencies were applying to the district to more fully develop and implement a school integration plan. The validity of these data is enhanced by the fact that this effect also occurs in the non-participating sample.

It is less clear why there was not an increase in the influence of the principals in the participating schools. This may be due to the fact that by participating in the Program Groups and sharing problem-solving activities with the principal teachers felt more of a partner in the influence process regarding policies and programs in the school and thus did not attribute more influence to the principal. However, it should also be noted that, despite the predictions of some of the more skeptical individuals in the district, teachers in participating schools did not attribute less influence to principals after the OD intervention. Thus, as a result of having participated in the OD program, principals did not lose power or influence in their schools.

The influence patterns reveal an overall feeling by teachers in participating schools that influence at the technical core level was increasing in their schools. They began the intervention with lower perceptions of their own influence and that of the students in their schools than the teachers in

Table 6.7

Changes over Time on Environment Scales

	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=120)	t_{org} (N=8)	Individual Level Interaction Effect (time x participation)
Participating Samples						
Environment						
Environmental influence on policy and programs						
Students	2.38	3.08	+	-4.40^{***}	-6.80^{***}	
Teachers	3.26	3.57	+	-2.92^{**}	-2.83^{*}	
Principals	4.04	4.09	+			
Central office	4.34	4.43	+			
Board of education	4.44	4.26	-			
Parents	3.08	3.17	+			
The AFT and affiliates	3.14	3.09	-			
State government	3.15	3.92	+	-5.81^{***}	-3.96^{**}	
Federal government	3.06	3.73	+	-5.02^{***}	-3.42^{**}	
Community agencies (police, fire, etc.)	2.32	2.56	+	-2.22^{*}		

	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
Non-participating Samples					
Environment					
Environmental influence on policy and programs					
Students	2.54	2.79	+		
Teachers	3.44	3.44	-		
Principals	4.12	4.05	-		
Central office	4.19	4.28	+		
Board of education	4.23	4.31	+		
Parents	2.94	3.02	+		
The AFT and affiliates	2.91	3.03	+		

Table 6.7 (continued)

	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
State government	3.06	3.69	+	-4.25^{***}	-5.26^{***}
Federal government	3.08	3.61	+	-3.57^{***}	-4.70^{**}
Community agencies (police, fire, etc.)	2.13	2.28	+		

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*Significant at $p < .05$.

**Significant at $p < .01$.

***Significant at $p < .001$.

non-participating schools and higher perceptions of the influence of other locations, such as the Board of Education and the central office. At the end of the intervention, they perceived more influence by both teachers and students than did the non-participating schools. If this indicates a trend, it can be said that the OD program brought more influence to the location of the performance of the technical core task--the student-teacher interface.

School Survey Questionnaire Data

As indicated earlier, it is not methodologically proper to use the School Survey data as an unbiased measure to assess the impact of the OD intervention on the participating and non-participating schools. This is because the School Survey data was fed back to both participating and non-participating schools. As a result, respondents from the schools not only became sensitized to certain issues by filling out the survey, but these testing effects were made even stronger because the data were categorized and fed back to the teachers to then be used in problem solving. The content of this feedback data implied a certain normative stance toward what constitutes a healthy school organization. Thus, these implicit norms of the feedback data can themselves create reactions in school personnel depending upon their own normative views of the school organization. This is why the evaluation questionnaire based on an open systems model of the school organization was used as the major basis for summative evaluation.

However, the content of the School Survey can still provide some useful evidence regarding the impact of the OD program. The School Survey is school specific in content and thus provides important information regarding how teachers perceive their work environment. In this section, we will discuss two predicted results of the intervention on the School Survey data. First, we will discuss the predicted direct results of the OD intervention on the School Survey data; and, second, we will discuss the indirect results of the OD intervention on this data.

Direct Effects on School Survey Data of Participation in the OD Program

The hypothesis here is as follows:

H19: The intervention will directly affect the degree to which the quality of the structure and process of the host organization is perceived as favorable. Specifically, it is predicted that participation in the OD program will result in teachers rating their schools as more favorable in the following areas:

- a) colleague relations
- b) supervisory/principal relations
- c) administrative practices
- d) performance and development
- e) voice in educational program
- f) quality of meetings (professional work load).

Table 6.8 presents the School Survey data for participating and non-participating schools. The data indicate that all the hypothesized results are significant in the participating schools except for Colleague Relations at the individual level of analysis. We will discuss the results in more detail below.

Internal Relations. Three scales of the School Survey dealt with internal relations in the school district: Colleague Relations, Supervisory (Principal) Relations, and Administrative Practices. We hypothesized that the OD program would favorably affect all three of these scales. We will discuss each one separately below.

Colleague Relations. Colleague Relations focuses on the teachers' perceptions of the friendliness of other teachers (Staff Integration) and on professional, task-oriented support for one another (Professional Support). It was indicated above that this was one area in the School Survey where improvement after the OD intervention was predicted but did not occur at the

Table 6.8

Changes over Time on School Survey Scales:
Significant Changes for Participating and Non-participating Samples (t-tests)
and
Significant Interaction Effects between Change and Program Participation (two-way ANOVA's)
Individual and Organization Level Analyses

	Participating Samples					Individual Level Interaction Effect (time x participation)	Non-participating Samples				
	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=120)	t_{org} (N=8)		$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
Client Relations											
School community relations	3.16	3.34	+	-2.61^{**}	-3.27^{**}		3.31	3.46	+	-2.05^{*}	
Community influence	3.52	3.73	+	-2.27^{*}	-2.63^{*}		3.64	3.80	+		
Community interest	3.09	3.22	+				3.37	3.41	+		
Students	3.40	3.54	+				3.56	3.64	+		
Internal School Relations											
Colleague relations	3.25	3.45	+		-2.96^{*}		3.38	3.50	+		
Professional support	3.37	3.52	+				3.56	3.65	+		
Staff integration	3.16	3.38	+		-3.51^{**}		3.21	3.34	+		
Supervisory relations	3.10	3.57	+	-3.90^{***}	-3.08^{*}	*	3.74	3.71	-		
Administrative practices	2.50	2.86	+	-3.48^{***}	-3.09^{*}	*	2.74	2.88	+		
Professional Climate											
Performance and development	2.89	3.23	+	-3.19^{**}	-2.72^{*}	*	3.37	3.36	-		
Faculty voice in educational program	2.36	3.00	+	-7.69^{***}	-8.23^{***}		2.54	3.02	+	-4.68^{***}	-4.61^{**}
Participation in program setting	2.36	3.16	+	-7.91^{***}	-8.70^{***}		2.57	3.18	+	-5.20^{***}	-6.28^{***}
Responsiveness to faculty	2.31	2.83	+	-4.54^{***}	-4.36^{**}		2.52	2.84	+	2.83^{**}	-2.67^{*}
Facilities											
Materials and equipment	3.10	3.29	+				3.31	3.33	+		
Building and facilities	2.65	2.91	+	-2.46^{*}	-2.68^{*}		2.64	2.94	+	-2.56^{**}	-2.87^{*}
Work Load											
Professional work load	2.88	3.11	+	-2.22^{*}		*	2.94	2.94	=		
Non-professional work load	3.44	3.56	+				3.28	3.24	-		
School Performance											
Educational effectiveness	3.10	3.45	+	-3.97^{***}	-4.63^{**}		3.33	3.46	+		
Evaluation of students	2.96	3.15	+	-2.27^{***}			3.01	3.25	+	-2.51^{**}	-3.76^{**}
Cognitive evaluation	2.85	3.03	+				2.68	3.00	+	-2.70^{**}	-2.38^{*}
Student placement	3.06	3.26	+	-2.14^{**}	-2.70^{*}		3.32	3.45	+		
Special services	2.80	2.97	+		-3.15^{*}		3.00	3.04	+		
Services for special children	2.88	2.97	+		-2.47^{*}		3.06	2.96	-		
Services for student and staff improvement	2.71	3.03	+	-3.03^{**}	-3.68^{**}		2.86	3.10	+	-2.17^{*}	

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[*] Significant at $p < .05$.

[**] Significant at $p < .01$.

[***] Significant at $p < .001$.

individual level of analysis.

Supervisory Relations. Supervisory (Principal) Relations is concerned with the teacher's evaluation of his/her principal as a communication link and buffer between the faculty and the environment. It also focuses on supervisory concern with work problems and educational issues facing the teachers. The participating schools were initially significantly lower than the non-participating schools on this category. The data in Table 6.8 indicate that teachers in the participating schools perceived a significant improvement on this dimension ($p < .001$). There was little change on this scale in the non-participating schools. The analysis of variance yielded a significant ($p < .05$) interaction effect between time and participation. Thus, it appears that participation in the Program Groups and working with the principal in problem-solving activities was leading teachers to have more favorable attitudes toward their principals. This is a particularly important finding in that some critics of the OD program at its beginning in the district felt that the program would increase the hostility between teachers and principals because "once you give teachers a little influence in the school, they would want to run the whole show and thus they would lose respect for the principal." The data indicated just the opposite. Teachers felt better about their principals after the OD program.

Administrative Practices. Administrative Practices assesses the teachers' perceptions of board-administrator-teacher relationships. It focuses on the teachers' evaluation of the technical, administrative, and interpersonal relations aspects of the operation of the district at the executive level of the system. The participating schools were initially well below the non-participating schools on this category, also.

The data in Table 6.8 again indicate that teachers in the participating schools perceived a significant improvement ($p < .05$) after the OD intervention in administrative practices. They had caught up with the non-participating schools despite an increase in these schools, also. There was a significant interaction effect between time and participation status in the two-way analysis of variance. This improvement in the perception of administrative practices again may be due to the increased interaction and communication the Program Groups were having with district central office personnel. Increased contact through the problem-solving process may have resulted in teachers getting a better understanding and perhaps appreciation for district-level personnel.

Professional Climate. Two scales of the School Survey dealt with the climate in the school as it affected professional development and performance in the school: Performance and Development, and Faculty Voice in Educational Program. The hypothesized improvement in both these areas did occur, as will be reported below.

Performance and Development. Performance and Development assesses the teachers' perceptions of the effectiveness of procedures used to evaluate teacher performance and stimulate the professional growth of teachers in the system. The participating schools were initially significantly lower on this category than the non-participating schools. There was a significant increase in the participating schools, while the non-participating schools remained constant. The two-way ANOVA yielded a significant interaction effect (time x participation). It may be that participation in the Program Groups and the increased involvement that the teachers are having in school problem solving is resulting in their feeling that they are gaining some development in their own skills as professionals. This conclusion is substantiated by some of the interview results discussed in the case studies.

Faculty Voice in Educational Program. This dimension measures the teacher's satisfaction with his/her degree of involvement in designing and developing the school's educational program. This category has been broken down into two subscales. Participation in Program Setting focuses on the teacher's involvement in curriculum development and selection of materials. The participating schools were initially significantly lower than the non-participating schools on this subscale. Responsiveness to Faculty focuses on teachers' perceptions with regard to how well administrators respond to faculty complaints or decisions that teachers would like to appeal.

The data in Table 6.8 indicate that teachers in both the participating and non-participating schools perceived significant improvements after the intervention in both Participation in Program Setting and Responsiveness to Faculty. These results in both participating and non-participating schools may be due to the OD intervention. One of the results of the OD program was that teachers in the participating schools, through their Program Groups, had more interaction and communication with their principals and other administrators in the district. This may have had the result of principals, and especially district-level administrators, feeling more comfortable in interacting with the individual schools. The result, then, may be that even in the non-participating schools teachers may be experiencing a little more involvement in setting educational programs. Also, the non-participating school principals went through the OD training process and, as a result, may have tried to get teachers more involved in their schools. An alternative explanation is that the style of the new Superintendent may have created perceptions of increased voice across the district. Furthermore, we know from several sources that the second year of the intervention coincided with a time of major curriculum planning and revision in the district. Such planning was characterized by heavy teacher input through various curriculum committees.

Quality of Meetings. The School Survey category labelled Professional Work Load consisted of items which dealt with the quality of meetings in the school and district. We hypothesized improvement in this area both because the Program Group meetings were designed to be highly relevant to the teachers' needs and because training provided principals and teachers with skills which should be applicable to any meeting situation.

The participating and non-participating schools were initially almost equal in this category. The participating schools increased significantly ($p < .03$) while non-participating schools remained the same. There was a significant ($p < .05$) two-way interaction effect (time x participation) in the analysis of variance.

One explanation for this, in addition to the reasons stated above, is that in many of the participating schools the principals reduced the number of faculty meetings to accommodate the Program Group meetings. They began handling more business through memos if it did not require actually convening the faculty.

Indirect Effects on School Survey Data of Participation in the OD Program

It is difficult *a priori* to specify which of the remaining School Survey categories will be affected by participation in the OD intervention. Which other categories are affected would seem to depend upon the areas the Program Groups identified as problem areas and then worked on in their groups. The hypothesis is as follows:

H20: The intervention will indirectly affect the degree to which the quality of school functioning in certain School Survey areas is perceived as favorable if the schools identify these areas as problem areas and use the mechanisms provided by the intervention to solve the problems.

Table 6.9 presents the solutions implemented in the various general areas. It is predicted that teachers' perceptions of these dimensions will improve after the OD intervention.

Before discussing the School Survey data, several conclusions can be reached from the problems categorized in Table 6.9. First, problems were identified in each of the School Survey areas of Client Relations, Internal School Relations, Professional Climate, Facilities, Work Load, and School Performance. Second, the two areas that had the most problems identified and worked on were Facilities (11) and School Performance (10). This is an interesting outcome in that it indicates that teachers were identifying very concrete problems to work on that affected their buildings and the performance of their schools as they dealt with students. We will examine the School Survey questionnaire data to see what changes occurred in the remaining School Survey dimensions as a result, perhaps, of the problem-solving activity of the Program Groups. Table 6.8 is presented again for the reader's convenience.

Client Relations. Client Relations has two dimensions: School-Community Relations and Students. School-Community Relations has two subparts: Community Influence, which focuses on the teachers' perceptions that parents exert legitimate pressure on the school, and Community Interest, which focuses on teachers' perceptions of the community wanting to improve relations with the school. Students focuses on the favorability of attitudes of teachers toward students.

Problems listed in Table 6.9 indicate that teachers worked on three

Table 6.8

Changes over Time on School Survey Scales: Significant Changes for Participating and Non-participating Samples (t-tests) and Significant Interaction Effects between Change and Program Participation (two-way ANOVA's) Individual and Organization Level Analyses

	Participating Samples					Individual Level Interaction Effect (time x participation)	Non-participating Samples				
	$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=120)	t_{org} (N=8)		$\bar{X}$ Pre-test	$\bar{X}$ Post-test	Change	t_{ind} (N=100)	t_{org} (N=8)
Client Relations											
School community relations	3.16	3.34	+	-2.61**	-3.27**		3.31	3.46	+	-2.05*	
Community influence	3.52	3.73	+	-2.27*	-2.63*		3.64	3.80	+		
Community interest	3.09	3.22	+				3.37	3.41	+		
Students	3.40	3.54	+				3.56	3.64	+		
Internal School Relations											
Colleague relations	3.25	3.45	+		-2.96*		3.38	3.50	+		
Professional support	3.37	3.52	+				3.56	3.65	+		
Staff integration	3.16	3.38	+		-3.51**		3.21	3.34	+		
Supervisory relations	3.10	3.57	+	-3.90***	-3.08*	*	3.74	3.71	-		
Administrative practices	2.50	2.86	+	-3.48***	-3.09*	*	2.74	2.88	+		
Professional Climate											
Performance and development	2.89	3.23	+	-3.19**	-2.72*	*	3.37	3.36	-		
Faculty voice in educational program	2.36	3.00	+	-7.69***	-8.23***		2.54	3.02	+	-4.68***	-4.61**
Participation in program setting	2.36	3.16	+	-7.91***	-8.70***		2.57	3.18	+	-5.20***	-6.28***
Responsiveness to faculty	2.39	2.83	+	-4.54***	-4.36**		2.52	2.84	+	2.83**	-2.67*
Facilities											
Materials and equipment	3.10	3.29	+				3.31	3.33	+		
Building and facilities	2.65	2.91	+	-2.46*	-2.68*		2.64	2.94	+	-2.56**	-2.87*
Work Load											
Professional work load	2.88	3.11	+	-2.22*		*	2.94	2.94	=		
Non-professional work load	3.44	3.56	+				3.28	3.24	-		
School Performance											
Educational effectiveness	3.10	3.45	+	-3.97***	-4.63**		3.33	3.46	+		
Evaluation of students	2.96	3.15	+	-2.27***			3.01	3.25	+	-2.51**	-3.76**
Cognitive evaluation	2.85	3.03	+				2.68	3.00	+	-2.70**	-2.38*
Student placement	3.06	3.26	+	-2.14**	-2.70*		3.32	3.45	+		
Special services	2.80	2.97	+		-3.15*		3.00	3.04	+		
Services for special children	2.88	2.97	+		-2.47*		3.06	2.96	-		
Services for student and staff improvement	2.71	3.03	+	-3.03**	-3.68**		2.86	3.10	+	-2.17*	

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*Significant at $p < .05$.

**Significant at $p < .01$.

***Significant at $p < .001$.

Table 6.9

Solutions Implemented and Related School Survey Categories

Problems Related to Client Relations

1. Field day students (Students)
2. Parent-Teacher Achievement Night (Students, Community Relations)
3. Compiled list of community resources (Community Relations)
4. Revamped awards program (Community Relations, Students)
5. Carried out complete school-wide, year-long citizenship program (Students)

Problems Related to Internal School Relations

1. Suggestions to improve classroom discipline of new teachers (Colleague Relations)
2. Set up weekly principal-school bulletin (Supervisory Relations)
3. Created communication forms for intra-school memos (Colleague Relations)
4. Set up agenda committee with principal (Supervisory Relations)
5. Organized faculty potluck lunches (Colleague Relations)
6. Itemized available instructional materials to facilitate sharing atmosphere (Colleague Relations)
7. Developed and implemented plan for group selection of math texts (Colleague Relations)

Problems Related to Professional Climate

1. Planned half-day workshop for '76-'77 (Performance and Development)
2. Met with curriculum supervisors to get input into supplementary materials (Voice in Educational Program)

Problems Related to Facilities

1. Procedures for utilizing library (Building and Facilities)
2. Committee for increasing use and quality of resource room (Materials and Equipment)
3. Decoration of teachers' lounge (Building and Facilities)
4. Pop machine in lounge (Building and Facilities)
5. Doors locked at lunch and pass system for visitors (Building and Facilities)
6. Creation of teacher workroom and relocation of nurse and itinerant teachers (Building and Facilities)
7. Physical changes to make parking lot safer (Building and Facilities)
8. Secured telephone for social worker's new room (Material and Equipment)

Table 6.9 (continued)

Problems Related to Facilities (continued)

9. Secured classroom keys for special education teachers (Building and Facilities)
10. Plan for teacher access to school during non-work hours (Building and Facilities)
11. Procedures for locating and increasing accessibility of reading material (Materials and Equipment)

Problems Related to Work Load

1. Volunteer clerical program (Non-professional Work Load)
2. Procedures for running off dittos (Non-professional Work Load)
3. New routing system (Non-professional Work Load)

Problems Related to School Performance

1. Scheduling itinerants (Special Services)
2. Presentation by special services personnel (Special Services)
3. Cross grading of students in reading (Evaluation of Students)
4. Articulation of school services in school (Special Services)
5. Guidelines for student placement in classes (Evaluation of Students)
6. Improvement of psychological services (Special Services)
7. Communication of child's reading ability between grades (Evaluation of Students)
8. Calendar for itinerant teachers (Special Services)
9. Sought more special services personnel (Special Services)
10. Plan to change placement procedures of child into reading (Student Evaluation)

problems related to school-community relations. It is expected then that successful solution of these problems should lead to more favorable perceptions on the part of teachers in the participating schools of school-community relations. The School Survey data in Table 6.8 indicates a significant improvement after the intervention for the overall School-Community Relations scale and the subscale of Community Influence for teachers in both participating and non-participating schools. Thus, teachers in all schools in the district had more favorable attitudes toward school-community relations. This may have been a general effect of the changeover in Superintendent and in school board composition. In general, we can not discern an effect here due to solutions implemented by the participating schools, although there is such a tendency.

Facilities. Facilities has two dimensions. Materials and Equipment provides information on the teachers' opinions concerning the selection, quality, quantity, and use of instructional materials, aids, and equipment in the school. Building and Facilities focuses on the teachers' perceptions about the adequacy of the physical conditions within the school and administrators' interests in improving them. The list of problems identified and worked on in Table 6.9 indicates that two of the facilities problems were related to materials and equipment while the remaining nine problems were related to the building and facilities.

The School Survey data presented in Table 6.8 indicate improvement in teachers' perceptions of the building and facilities after the intervention in both those schools participating in the OD program ($p < .015$) and those schools not participating in the OD program ($p < .011$). This general increase makes it impossible to state with any certainty that the improvement in the participating schools was a program effect.

The data in Table 6.8 indicate no significant improvement in perceptions in materials and equipment in either the participating or the non-participating schools.

Work Load. The increase in Professional Work Load in participating schools was discussed above as a hypothesized direct effect. The Program Groups did not implement any solutions in this area. They did implement three solutions in the area of Non-professional Work Load, which refers to the amount and type of non-professional duties to be performed as well as to administrative efforts to reduce this type of work. The changes in this area did not achieve significance in either group of schools. The significant results for Professional Work Load have already been explained as a result of the program itself and not as a result of solutions implemented through the program.

School Performance. School Performance has three general dimensions. Educational Effectiveness deals with the teachers' perceptions of the effectiveness of the school program in meeting the developmental needs of students. Evaluation of Students has two subscales: Cognitive Evaluation of Students is the degree of favorable teacher attitude toward evaluation of student performance and Student Placement focuses on the favorability of the teachers' attitudes toward the schools' placement of students at the appropriate educational level. Special Services has two components: Services for Special Children focuses on teachers' perceptions of the adequacy of psychological services, special language programs, and learning disability programs for students who need them, and Services for Student and Staff Improvement focuses on teachers' perceptions of the adequacy of remedial and/or diagnostic services for children and curricular assistance for teachers.

The list of problems worked on (Table 6.9) indicates that of the ten problems in the general area of School Performance, six were in the area of Special Services. The School Survey data in Table 6.8 indicate that in the participating schools there was a significant improvement in teachers' perceptions of favorability after the OD intervention in the Special Services subdimension of Services for Student and Staff Improvement ($p < .003$). In looking at the problems identified in Table 6.9, it is apparent that they fit into this general area of services for improvement. It should also be pointed out that there was also a significant increase in teachers' perceptions of services for student and staff improvement in the non-participating schools. The Program Group efforts in this area involved a great deal of interaction with central office special services personnel. It is quite possible that these interactions sensitized the central office to the felt needs of teachers and that actions taken affected all schools in the district.

Other problems worked on and changes in School Survey data. The list of problems in Table 6.9 also indicates that a number of problems were identified in the Internal School Relations and Professional Climate School Survey areas. Earlier, it was reported that we found significant perceptions of improvement by teachers in the participating schools in these areas at the end of the OD intervention.

Summary: relation of problems worked on and School Survey data. The data in Tables 6.8 and 6.9 indicate that there is a tenuous relationship present between problems the Program Groups identified and worked on and teachers' resulting perceptions of increased favorability of those dimensions in the School Survey data. Specifically, it was found that there were significant changes in the School Survey questionnaire for each of the areas in which the Program Groups identified and worked on problems. Many, but not all, areas also showed significant increases in the non-participating samples. Although it is impossible to assign causality to their relationship, it seems that at least some data exist to indicate that when problems were worked on by the Program Groups this was associated at the end of the OD intervention with some improvement in teachers' perceptions of favorability in that dimension of the School Survey.

Interview Results: Appraisal by Program Participants

In May 1976, structured interviews were held with the principal, leader, and monitor in each of the seven elementary schools which remained in the OD program for the second year. These interviews had two purposes. First, they were designed to get information about how the program had progressed in each school. Much of this information will be reported in the case studies and the formative evaluation chapter. The second purpose was to get subjective appraisals from the program personnel of the OD program in their schools. The first part of this section will report this subjective evaluation data.

In June 1976, structured interviews were held with the Superintendent and nine central office personnel to solicit their perceptions concerning the value and feasibility of the OD program, its implementation in their district, and changes which they thought should be made in the design of the program or the implementation procedures. The second part of this section will report this data.

The interview schedules for school and district level personnel appear as Appendices M and N.

Interviews with Principals, Leaders, and Monitors

This section will report the results of four structured questions designed to illuminate the manner in which the OD program was received by the teachers in the schools and the changes in the role of key program personnel in the school. Specifically, we were concerned with: (1) the reasons why people participated in the program; (2) the arguments which were voiced against the program; (3) the sources of conflict within the Program Groups; and (4) changes in the roles of the principal, leader, and monitor in the school as a result of the OD program. Finally, we will report the results of an open-ended question concerning the benefits to the school and problems which resulted from the program.

Reasons for participation in the OD program. The respondents were asked to rate the extent to which each of eight reasons for participation were present among their faculty on a four-point scale ranging from "0" (not at all) to "3" (a lot). Table 6.10 shows the eight reasons and the average responses of the principals and of the leaders and monitors for each.

The responses of the principals and teachers are very similar. Both downplayed the motivation to gain leverage on the principal and to "gripe." Both felt that solving problems, increasing teacher influence, and increasing professional interaction were major reasons. The leaders and monitors also felt that many teachers participated because they did not want the other teachers making decisions "behind their backs." This was a way of explaining the contingent of teachers who came to meetings but complained about the program.

When our involvement in the program terminated, the principals attributed fewer negative motivations to the teachers than they had at the onset. The relatively non-antagonistic nature of the program in most schools combined with the willingness of many teachers to expend a lot of time and effort to deal with school problems probably contributed to the perceptions by principals,

Table 6.10

Interviewee Perceptions of Teachers' Reasons for Participating in the OD Program

Principals'(N=7) Responses*	Reason	Leaders' and Monitors' (N=13) Responses
.286	As a gripe session	1.23
1	To get to know each other better	1.31
2.57	To try to solve general school problems	2.85
2.14	To increase teacher influence in the school	2.15
2.17	For professional interaction	1.77
1.43	To get ideas that would help out in their teaching	1.15
.71	To avoid having decisions made behind their backs	2.0
.67	As a tool to gain leverage on the principal	.92

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*The principals responded with their perceptions of the teachers' reasons for participating.

leaders, and monitors that teachers were professionally motivated to participate in the program.

Arguments against the OD program. The interviewees were asked to identify which cf six arguments against the program emerged among their faculty, and whether the program was impeded by these feelings. Responses to the eight arguments were scored as follows:

0 = did not emerge in my school

1 = was voiced but did not impede the program

2 = was voiced and impeded the program.

Table 6.11 shows the mean scores for each of the six arguments against the program and the number of respondents who replied that teachers in their schools had voiced the argument. Principals, leaders, and monitors were lumped together because there was little difference in their response patterns. It can be seen that the major argument against the program came from teachers who did not feel they should have to meet on their own time. Some teachers in three schools refused to participate for this reason. In one school, the program terminated because of perceptions that the district office did not support the program. In two schools, there were teachers who felt that the program posed a threat to their own autonomy because of potential constraints on their behavior resulting from group decisions. This was not perceived to have impeded the program in those schools, however.

In general, the interviewees did not feel there was a lot of complaining about the OD program. In most schools, individuals who did not want to participate simply stopped attending meetings. It was in schools where there was pre-existing divisiveness among the faculty that the program became somewhat identified with a subset of teachers, and the program caused more negative

Table 6.11

Frequency of Various Arguments against the Program as Reported by Leaders, Monitors, and Principals

Average Score*	Argument	Number of Times Mentioned (N=20)	Number of Schools Where Present
.45	Felt the program violated or threatened teacher autonomy	4	2
.85	Refused to meet on own time	5	3
.55	Program lacked district office support	3	1
.25	Program lacked principal support	2	1
.35	Felt problem solving not the job of teachers	2	2
.30	Felt there were not any problems to be solved	1	1

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*Range = 0 (did not emerge) to 2 (impeded the program).

reaction from the others.

Sources of conflict in Program Group meetings. The interim interviews reported in Chapter Two had indicated that in the process of bringing faculties together to perform the new role of group problem solving, conflict had often surfaced. Not only was the role new, but the purpose (problem solving) was broad and direction had to come from the group itself at the very time that it was working through the interpersonal problems of becoming a group. Table 6.12 illustrates the results of a question designed to ascertain what major sources of conflict were present in the meetings from time to time. Interviewees were asked to respond to each source of conflict on the following scale:

0 = was not present

1 = was present in some meetings

2 = was present and caused problems in group functioning.

Responses to this question were only solicited from teachers.

The amount of conflict reported differed greatly from school to school. The two most active schools, in terms of problem solving, also experienced the most conflict, probably reflecting the broader scope of activities. The leaders and monitors reported that the amount of conflict had declined in the second year in almost every school, possibly reflecting the focus on conflict management in the brush-up training at the start of the second year.

The most prevalent source of conflict was differences between teachers' educational philosophies, which in some instances made it very hard to get a consensus on a solution. Personality conflicts and conflict over the priorities of issues which could be dealt with by the group were also mentioned frequently. Conflict regarding the purpose or legitimacy of the program or dealings with the principal were less common.

Table 6.12

Sources of Conflict in Program Group Meetings as Reported by Leaders and Monitors

Average Score*	Source of Conflict	Number of Times Mentioned (N=13)	Number of Schools Where Present
1.15	Differences in educational philosophy	8	6
.85	Differences in priorities for problem areas to deal with	7	6
.77	Personality conflicts	6	5
.31	Conflict over purposes of the meetings	4	3
.46	Conflict over legitimacy of the program	4	3
.08	Conflict over how to deal with the principal	1	1

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*Range = 0 (not present) to 2 (caused problems).

Role changes as a result of the OD program. Interviewees were asked to indicate whether they felt that various aspects of the general role in the school of the key program personnel (principal, leader, and monitor) had changed as a result of the OD program. Principals were questioned about their own role and that of the leader and the monitor. The leader and the monitor were questioned concerning their own role and that of the principal. They were questioned concerning five aspects of the role: (1) knowledge about what is going on in the school, (2) prestige, (3) authority, (4) influence, and (5) position as a communication link. The results are reported in Table 6.13 for changes reported in the role of the principal and in Table 6.14 for the roles of the leader and the monitor.

Program personnel in general did not perceive a weakening in the role of the principal as a result of the OD program. With a few exceptions, changes in role reported by the principal about himself or by the leader and monitor about their principal were in a positive direction. The greatest changes were reported in the principal's "knowledge of what is going on in the school" and "position as a communication link." Only one principal felt his authority had declined as a program outcome.

The leaders and the monitors reported more change in their own roles than was perceived by the principals. Once again, however, almost all changes reported were in the positive direction. The greatest changes were again in their "knowledge of what is going on in the school" and "position as a communication link." Leaders and monitors told us that teachers were beginning to come to them to discuss both personal and professional problems. In addition, many felt that the group was passing more information to the principal than the faculty had done previously, and that the principal was becoming more

Table 6.13

Changes in Principal's Role Perceived as a Result of OD Program
(Number of Times a Change Reported and Direction of Change)

Principals' Self-reports (N=7)	Role	Leader-Monitor Reports about Principals (N=13)
3↑	Knowledge of what is going on in school	7↑ 1↓
1↑	Prestige	4↑
1↓	Authority	2↑
2↑	Influence	2↑ 1↓
2↑	Position as communication link	5↑ 1↓

Table 6.14

Changes in Role of Leader and Monitor Perceived as a Result of OD Program
(Number of Times a Change Reported and Direction of Change)

Principal Reports about Leaders and Monitors (N=7)	Role	Leaders-Monitors' Self-reports (N=13)
3↑	Knowledge of what is going on in school	7↑
0	Prestige	4↑
0	Authority	4↑
2↑ 1↓	Influence	5↑
2↑	Position as communication link	9↑

concerned with keeping his faculty informed.

Benefits and problems resulting from the OD program. The major benefits reported as resulting from the program were in the areas of: (1) faculty influence, (2) communication between teachers, and (3) communication between faculty and administration. Nine of the thirteen teachers who were interviewed and two principals referred to the first, faculty influence. They saw an increase in influence not only because of the Program Group decisions, but also because teachers were perceiving themselves as a legitimate source of influence and were speaking out more freely on issues, participating more in faculty meetings, and taking responsibility for doing things about their own problems.

Increased communication between teachers was mentioned by eleven of the teachers who were interviewed as being a benefit of the program. In several schools, teachers were reported as feeling a common bond for the first time and working better as a staff because they were "sitting down together to discuss school problems." The leader in one school said that professional interaction had become a regular part of the job and would be missed if the program ended.

Increased communication between the faculty and the principal was mentioned by five teachers and three principals as a beneficial outcome. In most cases, the respondents felt the increased communication was in both directions, from teachers to the principal and from the principal to teachers.

The only problem which was reported as having been caused by the OD program involved the separation of the faculty into OD participants and nonparticipants. This was mentioned by the leaders and principals of two schools, where participation in the program had been lower than 100 percent. In a third school, the monitor reported tension between the Faculty Advisory Council (a group of teachers who met with the principal to provide him with teachers' viewpoints) and the Program Group. Interviewees in four schools reported no problems at all stemming from the OD program.

In general, it seems that, from the perspective of the key personnel, there had been real benefits from the program, accompanied by minimal problems. Where divisiveness between teachers was already a problem, the OD program became a forum for conflict. In general, however, the amount of conflict was declining, and the program had ceased to be controversial in the schools. The faculties in the five schools where interest and involvement in the program had continued through the second year each voted to continue into a third year, lending substantiation to the reports of the leaders and monitors. In the two schools where the program became dormant in the second year, one principal and several teachers reported that they felt that the program had resulted nevertheless in a feeling of mutual involvement in school functioning.

Interviews with Central Office Personnel

Interviews were held with the Superintendent, five associate superintendents (one of whom had been the Acting Superintendent during the first year of the program) and four curriculum and special services coordinators. Nine of the ten reported direct experience with at least one Program Group. Because of the length of these interviews, we will report only the main themes voiced in the administrative appraisals of the program.

The major feeling voiced was that the purposes and design of the OD program were sound and had the potential to be very useful to a school district, but that for several reasons the program had not gotten a fair test in their district. Six respondents reported beneficial impact on the participating schools relating to increased faculty involvement, improved working climate, and better principal-teacher cooperation. Most respondents felt that the program had been definitely weakened by the lack of full district participation. They blamed this on the "unstable" situation in the district due to Superintendent changeover and to the central office's preoccupation with the changeover and with pressing matters such as court-ordered integration, redistricting and a teacher strike. They readily admitted that their own lukewarm feelings had weakened the program and resulted in reduced participation.

All five of the associate superintendents stated that they would recommend the program to another district. The new Superintendent did not feel he had had enough experience with the program to recommend it in particular, but felt that the concepts behind it--particularly its goal of increasing teacher participation in problem solving--were sound. At least one interviewee felt that the program was best suited for situations where there was more unity among the teachers. He cited divisiveness among the AFT and NEA members and the general vying for constituency as a reason why the program was not suited for their district.

Almost all agreed that the program would have been stronger if there had been commitment all the way down the line. They felt that the program had had limited but beneficial impact and that the data had been helpful to themselves and to the schools. Nevertheless, there was an ambivalence which pervaded the interviews. As central office administrators, they were concerned with the entire district. District impact was limited, by partial participation and by the state of flux in the administration, and thus they could not view this implementation effort as a complete success. The complete results of these interviews are reported in Appendix O.

Summary

This chapter has provided an overview of the impact of the OD program in those schools that have participated in the intervention. The participating and non-participating schools were compared to see what differences existed over the duration of the OD program on the School Survey questionnaire and the evaluation questionnaire. The findings were as follows:

Direct Effects on Evaluation Data of Participation in the OD Program

Organization Structure. After the intervention, scores in the participating schools were significantly higher for Standardization and Variety. There were no significant changes in either Autonomy or Hierarchy of Authority in the participating schools during the intervention. Apparently, teachers in the participating schools believed that there were more clear-cut procedures and mechanisms for getting things done in their buildings. There were no significant changes during the intervention in the non-participating schools.

Organizational Problem-solving Process. Teachers in the participating schools as contrasted to those in the non-participating schools perceived more capability after the OD intervention in Evaluation, Solution Generation, Internal Diffusion, Legitimation, Adoption, Implementation, and Routinization. Apparently, the training components that teachers in the participating schools were exposed to as part of the OD intervention were improving problem-solving capabilities.

Participation in Decision-making Process. The data provided weak evidence that there were effects due to participation in the OD program. In participating schools, there was a slight increase in perceptions of actual participation in policy decisions coupled with a significant decline in the non-participating schools, which produced a significant two-way interaction effect (time x participation) in the analysis of variance. In operational decisions, there was a small increase in the participating schools and a small decrease in the non-participating schools to again produce a significant time x participation interaction effect. The data also indicated that teachers' perceptions of how much they should participate did not change as a result of participation in the OD program.

Indirect Effects on Evaluation Data of Participation in the OD Program

The intervention was predicted to have more indirect effects on the following variables.

Resource Allocation Process. Teachers in participating schools perceived after the OD intervention that more resources and attention were given to the following school goals: develop a highly qualified staff; implement a comprehensive and integrated instructional program; produce a positive and supportive school environment; provide ongoing evaluation of school programs; be responsive to needs and concerns of the community; and communicate to the public the objectives, operations, and results of educational programs. Apparently, as a result of the OD program teachers felt more attention was given to these particular goals.

Goal Effectiveness. Teachers in participating schools perceived their schools to be more effective after the intervention in accomplishing the following goals: implement a comprehensive and integrated instructional program; provide ongoing evaluation of school programs; be responsive to needs and concerns of the community; and communicate to the public the objectives, operations, and results of educational programs. There were no changes in the non-participating schools.

Integration. In the participating schools, after the OD intervention teachers perceived less Role Ambiguity and more Intrinsic and Contextual Satisfaction. There was no change in Cohesiveness. There were no changes in the non-participating schools. Apparently, participation in the Program Groups was helping teachers to better define their role and at the same time experience more satisfaction in their job.

Environmental Influence. Teachers in the participating schools perceived significantly more influence after the intervention from students, teachers, state government agencies, federal government agencies, and community agencies. There were also changes in the non-participating schools in the perception of pressures from state and federal government agencies. This influence from these two types of agencies may reflect the pressure that the district was under to develop and implement a school integration plan, and in any case it would be expected to affect all the schools--which the results confirm.

Direct Effects on School Survey Data of Participation in the OD Program

Internal Relations. In the participating schools, teachers perceived after the intervention a significant improvement in Supervisory Relations and Administrative Practices, with no change in Colleague Relations. These improvements may be due to the increased interaction and communication the Program Groups were having. There were no changes in the non-participating schools.

Professional Climate. In the participating schools, teachers perceived after the intervention a significant improvement in performance and development activities in the schools for teachers. It may be that participation in the Program Groups and increased involvement in problem solving resulted in teachers feeling that they were gaining some development in their skills as professionals. Teachers in both participating and non-participating schools perceived an increase after the OD program in Faculty Voice in Educational Programs. These results may be due to the OD program in that the non-participating school principals received some OD training and district-level administrators may, as a result of the intervention, have felt more comfortable in interacting with schools. Thus, even in non-participating schools teachers' ideas may have been solicited.

Quality of Meetings. Teachers in the participating schools felt after the OD program that their meetings were of better quality. The training apparently helped improve meetings and unnecessary meetings were cancelled. There was no change in the non-participating schools.

Indirect Effects on School Survey Data of Participation in the OD Program

It was predicted that for the remaining categories of the School Survey questionnaire that teachers' perceptions of improvement would be dependent on problems that the Program Groups identified and worked on. Problems were identified in each of the School Survey areas. The areas that had the most problems identified were Facilities (11) and School Performance (10). With respect to the remaining School Survey dimensions not discussed above, the results are as follows.

Client Relations. Three problems were worked on in this area in the participating schools. The data indicated that teachers in both participating and non-participating schools perceived an improvement in School-Community Relations. This may have been due to the turnover of the Superintendent and in the school board composition.

Facilities. Eleven problems were worked on in this area by teachers in the participating schools. Teachers in both participating and non-participating schools perceived after the intervention an improvement in the building and facilities, while both groups perceived no improvement in materials and equipment.

School Performance. Ten problems fitting into this category were worked on in the participating schools. Six of these were in the area of special services. The School Survey data indicate that teachers in the participating schools perceived an improvement after the intervention in special services.

Interview Results: Subjective Assessment of Program Results

Structured interviews with leaders, monitors, and principals yielded information which stressed the essentially professional nature of the Program Group activities. Both teachers and principals felt that the major reasons for participation were to solve problems, increase teacher influence, and increase professional interaction. The conflict which emerged was often caused by differences between teachers in educational philosophy, which indicates that the Program Groups were, in many cases, discussing very basic issues affecting the educational process.

A major benefit reported to be a result of the program was increased communication among teachers. Although improvement in staff relations was not reflected in the Cohesiveness scale of the questionnaire, the interviews occurred four months after the final questionnaire was administered. It seems that by the end of the second year, many of the faculties were dealing constructively with the conflictual situations that are inevitable when problem areas relating to basic educational issues are confronted.

Many of the interviewees felt that teachers had become more influential in their schools as a result of the program. Principal influence, however, was in general not perceived to have changed. This lends some substantiation to the theoretical framework presented in the first chapter, which differentiates between problem areas requiring technical core problem solving and those requiring managerial problem solving. It seems that teachers as a group can become more active and influential in solving their problems without detracting from the influence that they perceive their principal to have or that the principal himself perceives.

Finally, the interviews indicate that the perceived roles in the schools changed as a result of the program. The greatest changes were reported increases in knowledge of what is going on the the school and in the position as a communication link of both the principal and the leaders and monitors. Changes in the prestige, authority, and influence of principals, leaders, and monitors were also reported in some schools.

In general, the principal's role does not seem to have been weakened by the program. On the contrary, he may have become more knowledgeable concerning what is going on in the school and more active in communicating information. Increased two-way communication between teachers and principals was also reported as a major benefit of the program.

The changes in the roles of the leaders and monitors which were reported indicate that those individuals were assuming a more prominent position among the staff. They were central to the increased communication among teachers which was reported as a program benefit. The fact that less of a change was noted in the prestige, authority, and influence of these individuals probably reflects the lack of institutional support for the roles, a fact which will be dealt with in later chapters. Nevertheless, it is clear that the leaders and monitors were assuming leadership positions in the emerging process of professional interaction and problem solving and were beginning to be recognized by the other teachers as people to whom they could go to with matters of concern to the faculty.

CHAPTER SEVEN

FORMATIVE EVALUATION PART I: THE CASE STUDIES OF THE SCHOOLS PARTICIPATING IN THE OD PROGRAM

Introduction

A main strength of this study, from the perspective of advancing the theory and practice of organization development in schools, is that there were nine different sites within the same district. Whereas district-level variables were constant across all sites, critical school-level variables could, and did, vary; and the implementation of the OD program differed greatly between buildings. Because of the large amount of contact with each site, we are able to take a grounded approach to theory construction (Glaser & Strauss, 1967) and to look across all schools to detect patterns in the interaction of variables. When coupled with the outcome variables, these patterns should enable us to make rudimentary generalizations concerning the applicability of this particular OD program in different organizational settings. These generalizations must of course remain tentative until they can be tested in a broader sample of schools located in different school districts.

This chapter will provide nine short case studies. This rather cumbersome format is warranted by the desire to enrich the aggregated-summative evaluation of the last chapter with descriptions of actual program implementations. The information provided in this chapter is the basis for the next chapter, which will present a more general formative process evaluation of the OD program. It is hoped that these case descriptions will be of interest to the reader and that they will give meaning to the variables and categorizations used in the process analysis section.

Each case description will be divided into four general sections: Context, Effort (Input), Process, and Output. These are the four main areas of concern in the systems approach to formative evaluation which was described in Chapter Three. Each case description will be followed by tables summarizing its pre- and post-intervention data. In the following case studies, all references to school rankings in the data will refer to the ranking only of the eight participating elementary schools, unless otherwise noted.

In this discussion the first year refers to the 1974-75 school year, when the components of the OD program first became operational. The second year is the 1975-76 school year. This research project formally ended in the district in June 1976. The third year is the anticipated activity of the Program Groups in the 1976-77 school year.

School A

Context

School A was towards the middle of our sample in size, with 19 full-time teachers and 341 students. Approximately half of the students were minority, many of low socio-economic status, and the school ranked low in the district and considerably below the national norms on standardized tests. Poor community relations was a problem which bothered the staff quite a bit. Pre-test School Survey data placed School A at or near the top of the eight elementary schools which participated in the intervention in most categories but near the bottom in the School-Community Relations category.

The teachers in the building had a generally favorable attitude toward the principal, which was evident from the pre-test survey data which placed this school highest in the Supervisory Relations category. This generally positive attitude also came across in talking with teachers in the building. The principal utilized assumptions about human behavior which could be characterized as "Theory Y" (McGregor, 1960), in that he solicited input from his teachers, gave them a great deal of autonomy, and showed concern and respect for them as individuals.

The staff in School A was very cohesive and ranked second at the program's onset in both the Colleague Relations survey category and the Cohesiveness scale. Approximately one-third of the teachers belonged to AFT, and an additional one-third were NEA members. However, this did not seem to result in overt divisiveness in the faculty. Intervention team members who interacted with the faculty had the impression that the staff was composed of a diverse group of personalities and philosophies, very different from one another yet amiable and cooperative.

Pre-test evaluation data on the existence of group problem-solving processes in the school indicates that there was already a fairly high amount of such activity in comparison to other participating schools. In terms of the district as a whole, it had an average amount of problem-solving activity.

In summary, it can be stated that the internal climate of the school was among the healthiest of the participating schools. The major problem seemed to be in its poor relations with its external environment, or community. In particular, it had trouble generating positive interest and support from the parents in the community.

Effort

During the first year of the project, School A held a total of six meetings. After the initial three released-time meetings, they were regularly scheduled monthly. The leader reported spending approximately two and a half hours per meeting and the monitor, one and a half hours per meeting on the program. Both reported using the training manual a little bit, but not extensively. The leader, who was a very close friend of the principal, tended to carry out most of the tasks associated with group decisions himself, giving little opportunity for the monitor or other teachers to become involved in activities outside the group meetings. At the meetings themselves, however, there was a fairly steady 80 percent attendance rate.

At the end of the first year, the monitor married and left the district. The school did not elect a replacement to attend the second training session at Northwestern. During the second year, the leader, who was an active, "upwardly mobile" individual, had become involved in coaching (for pay) and had begun to work on his master's degree. Consequently, he lost enthusiasm for the program, in which his role did not result in either renumeration or organizational advancement. At the request of his faculty, he did call three meetings, which were well attended, but the program never really got off the ground the second year and no more meetings were held. In final interviews, both the principal and the leader indicated that the faculty would have been willing to continue the program had there been an interested leader who was willing to commit time and effort.

Process

The degree of implementation of the program in School A was not particularly high. In fact, during the first year it seemed to be very much a one-person show, with the leader unwilling or unable to delegate and involve other faculty members. Even the monitor, who began with a great deal of enthusiasm, found it hard to influence the program as there was a lack of teamwork between the leader and the monitor. During the second year, when the leader lost interest in the program, there was no one to pick up the ball and the program simply atrophied.

The principal in School A was philosophically at ease with the program and cooperated fully with all group efforts. His close friendship with the leader, however, may have been a problem for the program, as it made it easy for the two to work closely together to the detriment of group involvement.

The components of the program were used fairly regularly at first, but use of the communication forms and meeting monitoring instrument declined as the monitor found little incentive to continue filling them out. The leader reported having followed the systematic seven-stage change process, but it seems that he did not involve the group with some steps in the change process. During the second year, the leader did not make an effort to follow program guidelines.

Although considerable interest was shown in the first round of feedback data, the staff did not meet for a feedback session of the second round of data. The leader made no effort to convene such a session.

Meeting monitoring instruments indicate that the early program meetings in this school were characterized by a high degree of participation and openness. A concurrent high degree of conflict was reflective of the diverse educational philosophies of the staff. Both the leader and the monitor commented on this in first year interviews. The staff seemed able to deal professionally with one another, however, and to work through their differences of opinion.

In short, it appears that a major reason for the failure of this program to catch on was the ineffective implementation. In his final interview, the principal indicated that he believed the staff was willing to continue.

However, there simply was not an adherence to program guidelines, nor the feeling that there was truly a group effort. When the first year leadership crumbled, there were no replacements willing to take over, despite the generally favorable context for the program.

Output

Problems. During the first year, the Program Group in School A dealt with problems in two major areas: Client Relations and Special Services. Two "solutions" which emerged in the first category were a field day to improve student morale and a parent-teacher achievement night to increase parental interest and involvement. In the Special Services area, the teachers worked out a system for more effective scheduling of itinerant teachers. In addition, they invited district special services coordinators to meet with them to address feelings by the staff that School A was not receiving its share of special services personnel. The resulting meetings led to more of an understanding by the teachers of how special services were assigned and left them satisfied that their school was in fact getting its fair share.

During the second year, several meetings were convened at the request of the staff to try to improve the classroom performance and control of two new teachers who were experiencing great difficulty. It was the feeling of many of the staff that the educational atmosphere of the school was being negatively affected. The teachers as a group came up with a set of classroom guidelines to serve as examples for the new teachers and offered other forms of assistance.

Data. A summary of the data for School A appears in Tables 7.1a and 7.1b. It was characterized by very few statistically significant changes. Two School Survey scales showed significant improvement, Participation in

Program Setting and Services for Student and Staff Improvement. The latter may have been a result of the concerted group effort on problems in the area of special services. The School-Community Relations category became more favorable, but did not reach statistical significance. In general, the School Survey results showed no systematic pattern toward either greater or less favorability. School A was one of the few participating schools which showed a decrease in favorability on many scales (about 30 percent), although the decrease never achieved statistical significance.

Evaluation questionnaire results were also mixed. Four of the seven stages of the decision-making process showed an increase, with Implementation and Routinization being notably non-significant. This non-significance perhaps reflects the failure of the OD program itself to be satisfactorily implemented or routinized. One Resource Allocation item -- To Be Responsive to the Community -- showed a significant increase, perhaps reflecting group efforts in this direction. An interesting finding is a general downward trend in perceptions of Organizational Effectiveness, which may be indicative of an increase in sensitivity to problems partially as a result of the aborted OD program.

In summary, it can be said that the OD program in School A had very little impact, either in terms of altered perceptions or problems solved. Despite a relatively favorable context, the process failed to be implemented in its entirety and the effort petered out. Leadership appeared to be a critical variable in this school, both in its presence during the first year and its absence during the second year of the active operation of the OD program.

Table 7.1a

School Survey Data: Pre-Post Intervention T-tests: School A
(Pre-test N = 16, Post-test N = 17)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Client Relations					
School community relations	2.94	3.14	+		
Community influence	3.38	3.75	+		
Community interest	2.43	2.50	+		
Students	3.71	3.52	-		
Internal School Relations					
Colleague relations	3.58	3.64	+		
Professional support	3.75	3.50	-		
Staff integration	3.48	3.71	+		
Supervisory relations	3.84	3.80	-		
Administrative practices	3.05	3.13	+		
Professional Climate					
Performance and development	3.38	3.35	-		
Faculty voice in educational program	2.68	3.05	+		
Participation in program setting	2.53	3.19	+	-2.14	(.04)
Responsiveness to faculty	2.87	2.90	+		
Facilities					
Materials and equipment	3.18	3.44	+		
Building and facilities	3.15	3.17	+		
Work Load					
Professional work load	3.49	3.48	-		
Non-professional work load	4.45	4.16	-		
School Performance					
Educational effectiveness	3.26	3.45	+		
Evaluation of students	2.70	2.90	+		
Cognitive evaluation	2.44	2.57	+		
Student placement	2.96	3.23	+		
Special services	2.81	2.97	+		
Services for special children	2.82	2.81	-		
Services for student and staff improvement	2.71	3.19	+	-2.04	(.05)

Table 7.1b

Evaluation Survey Data: Pre-Post Intervention T-tests: School A
(Pre-test N = 16, Post-test N = 17)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Environment					
Environmental influence on policy and programs					
Students	3.07	3.25	+		
Teachers	3.50	3.50	0		
Principals	4.08	4.00	-		
Central office	4.40	4.63	+		
Board of education	4.46	4.38	-		
Parents	3.00	3.38	+		
The AFT and affiliates	3.17	2.94	-		
State government	3.08	4.00	+	-1.91	(.07)
Federal government	2.86	3.88	+	-2.62	(.01)
Community agencies (police, fire, etc.)	2.10	3.06	+	-2.80	(.01)
Organization Structure					
Standardization	3.91	4.31	+		
Autonomy	4.39	4.39	0		
Variety	4.00	4.33	+		
Hierarchy of authority	2.82	3.12	+		
Organizational Process					
Problem-solving process					
Evaluation	3.40	3.72	+		
Solution generation	3.16	3.84	+	-2.01	(.05)
Internal diffusion	2.56	3.31	+	-1.98	(.06)
Legitimation	2.55	3.29	+	-2.04	(.05)
Adoption	2.87	3.45	+	-1.73	(.09)
Implementation	3.45	3.65	+		
Routinization	3.30	3.51	+		
Participation in decision making					
Actual participation in policy decisions	1.41	1.50	+		
Should participate in policy decisions	2.97	2.92	-		
Actual participation in operational decisions	3.49	3.59	+		
Should participate in operational decisions	4.20	4.20	0		

Table 7.1b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Resource Allocation Process					
Amount of attention and resources					
1. Develop highly qualified staff	3.73	3.75	+		
2. Implement comprehensive and integrated instructional program	3.47	3.69	+		
3. To provide positive and supportive school environment	3.64	3.94	+		
4. To provide on-going evaluation of school programs for modification and development	3.15	3.63	+		
5. To experiment with educational innovations	3.43	3.13	-		
6. To be responsive to community	3.21	3.88	+	-2.03	(.05)
7. To communicate to public objectives and results of school programs	3.00	3.50	+		
8. To promote educational achievement of minority students	3.79	4.00	+		
9. To coordinate school activities with relevant community groups	3.14	3.31	+		
10. To lessen disciplinary problems	3.50	3.56	+		
Organizational Effectiveness					
Goal effectiveness					
1. Develop highly qualified staff	3.53	3.56	+		
2. Implement comprehensive and integrated instructional program	3.13	3.31	+		
3. To provide positive and supportive school environment	3.64	3.44	-		
4. To provide on-going evaluation of school programs for modification and development	3.00	3.31	+		
5. To experiment with educational innovations	3.43	2.88	-	+1.98	(.06)
6. To be responsive to community	3.29	3.13	-		
7. To communicate to public objectives and results of school programs	3.07	3.06	-		
8. To promote educational achievement of minority students	3.29	3.13	-		
9. To coordinate school activities with relevant community groups	3.29	3.06	-		
10. To lessen disciplinary problems	3.43	2.94	-		

Table 7.1b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Integration					
Role behavior					
Role overload	2.73	2.71	-		
Role ambiguity	2.19	2.23	+		
Job satisfaction					
Intrinsic satisfaction	4.30	4.59	+		
Contextual satisfaction	4.38	4.61	+		
Cohesiveness	4.73	4.71	-		

School B

Context

School B was a medium-sized elementary school, with 18 full-time teachers and 415 students. Approximately one-quarter of the student body was minority and the students came from both middle and lower-middle income families. The school ranked in the top half of the elementary schools on standardized tests. The school building was one of the oldest in the district, and dissatisfaction with it was reflected in the very low scores in the Building and Facilities category of the pre-test School Survey. The school ranked in the top three of the participating schools in all other categories except Colleague Relations, where it ranked sixth.

The teachers in the building had a generally favorable attitude toward their principal, although there were aspects of his interpersonal style which bothered some of them. Specifically, despite his general "Theory Y" assumptions about human behavior, he often came across as authoritarian due to his highly efficient and business-like manner. He recognized that he had this effect on people and viewed the OD program as a good mechanism for allowing the faculty to express itself without being intimidated by him. He was the principal most supportive of the OD effort both at the school level and at the district level.

Both survey data and evaluation questionnaire data placed the staff of School B low in terms of cohesiveness. Seventy-five percent of the faculty were members of NEA; however, interview data indicate that there was no real sense of commonality of interest or philosophy at the onset of the program.

Pre-test evaluation data revealed that this school had the highest amount of problem-solving activity of all the participating schools. It scored above the district average on six of the seven stages of the problem-solving process. Its comparatively low ranking on the Internal Diffusion stage was possibly a result of a lack of interaction between teachers, which may also have resulted in low Cohesiveness scores. On the whole, however, School B was among the healthiest of the participating schools. The general problem-solving capability of the school was evidenced by the effective handling of court-ordered integration several years earlier and by a continued high degree of educational effectiveness, as measured by teacher perceptions and rank on standardized tests.

Effort

The staff of School B put a great amount of effort into the OD program. Partly because the principal and leader never made it salient that participation in the program was voluntary, meetings were regularly scheduled and usually had 100 percent attendance. The principal greatly curtailed the number of faculty meetings (two in two years) in order to give an additional incentive for the program.

The leader and monitor both reported spending two hours of preparation for each meeting during the first year and slightly less during the second year. The group held a total of 23 meetings during the two years. In addition to following guidelines provided in the training manual very closely, implementing all components of the program thoroughly and adhering to the seven-stage problem-solving process, the leader and monitor developed a system of distributing pre-meeting agendas and post-meeting minutes in order to keep "OD matters" fresh in people's minds. The program implementation in this school reflected a great deal of effort by both the elected change agents and other faculty members, many of whom volunteered to carry out activities related to the various problem solutions adopted by the group.

At the end of the second year, the leader and the monitor stepped down. Two new individuals received training and were highly enthusiastic about continuing the program into a third year.

Process

The degree of implementation of the program was exceptionally high in School B. The leader and monitor assumed complementary roles and worked together very closely. All components were utilized (except that there was never a need for a policy meeting, although central office personnel were called in as resource personnel). The components seemed to have been used in the sense for which they were intended; that is, to improve group functioning and to support the seven stages of the decision-making process. Interview data indicate that by the end of the second year the group had learned to function quite effectively. Many of the interpersonal problems and philosophical conflicts which had been reported in the meetings of the first year had ceased to be a problem, and both the leader and the monitor remarked that the group had assumed a "professional character."

The group followed the program guidelines that suggested starting out with a fairly easy problem and proceeding gradually to the rather knotty problems which arouse divisiveness and/or involve complicated legitimation procedures. In the process of learning to be an effective group, the faculty experienced a great deal of positive reinforcement, both in terms of problems solved and changes made as well as actual support and encouragement from the principal. The marked improvement in data, which will be reported in the next section, also served as a form of reinforcement. It was evident that the principal and the teachers were pleased with the OD program. A special feedback meeting for the second round of data was scheduled so that the principal could be present to express his positive feelings about the program to the staff.

Output

Problems. During the first year, the Program Group in School B dealt with three problem areas concerning their building and facilities and one concerning school performance. Their first action was to redecorate their teachers' lounge, which up until that time was a little-used, dark and dingy room. Second, the teachers devised a scheduling and sign-up system to permit utilization of the school library during the times of the week when there was no librarian present. As a third group effort, they took various measures to increase the use of and improve the quality of their resource room, including utilizing the Parent Teacher Organization to purchase new materials, placing responsibility for maintaining an up-to-date resource room with a committee of highly interested teachers, and developing a norm of utilizing part of each meeting to share knowledge concerning the use of various teaching aids and materials.

The final problem area dealt with was the need to further individualize reading instruction by a cross-grading system. Predictably, this issue aroused philosophical differences, and the practice of moving students between classrooms to different reading groups was adopted by only half of the teachers. The leader and the monitor indicated during the final interviews, however, that many of the teachers who originally opposed the practice in the first year were later beginning to try it out, because it was working so smoothly for the others.

During the second year, two major issues--the psychological services of the district and the use of in-service time--were the focus of extensive group efforts. In the first area, three steps were taken: (1) a meeting was held with a special services coordinator to acquaint teachers with testing procedures and interpretation of results; (2) the faculty developed a system for determining priorities for the order in which students should be tested; and (3) a posting system was devised to make teachers aware of which students were undergoing psychological evaluation and their progress in each case. A fourth request for more psychologist's time was directed to the central office but failed to be approved.

In the area of in-service training, the faculty dealt with the problem that they did not perceive the in-service days provided by the district as meeting their professional needs. After much discussion concerning possible professionally useful ways to spend in-service days, the faculty arrived at a plan as to how they would like to spend one of the in-service days during the next Autumn. This was approved by the district office. A secondary benefit of the problem-solving efforts of the group was that in the course of deciding how best to spend their in-service day, they shared a good deal of information concerning current educational practices and interesting experiments or innovations in the area.

Data. A summary of the data for School B appears in Tables 7.2a and 7.2b. Almost all of the School Survey scales and sub-scales became more favorable at the post-intervention, many of them attaining statistical significance. The improvement in Colleague Relations, Supervisory Relations and Voice in Educational Program are probably indications of the smooth functioning of the OD program and the increase in cooperative efforts by the staff of the school. The improvement in the general area of Facilities can be directly linked to the successful group efforts in this area. Perceptions of Educational Effectiveness may have improved as a result of changes in the reading program and the general sharing of information and ideas among teachers. The improvement in Special Services was not statistically significant, despite the considerable effort of the group in this area.

There was a great deal of change in the evaluation data. In the general area of Environment, a significant increase in perceptions of both student and teacher influence over policies and programs was accompanied by a significant decrease in perceived influence of the central office and the board of education. Teachers began to perceive authority in their district as being less hierarchical. These changes may reflect the fact that for teachers in this building, a different picture had emerged of what could be accomplished by the building-level faculty.

A significant increase in all of the seven stages of the problem-solving process occurred. The Resource Allocation process appears to have been altered, with increased attention to staff development, program development and evaluation, and the school environment. Although perceptions of educational effectiveness generally improved, the only area in which the change achieved significance was the Development of a Highly Qualified Staff. In the area of Integration of the individual in the organization, improvement, although not significant, was shown in all areas except Role Overload, which remained the same.

In summary, it can be said that in School B a high degree of effort had resulted in a high degree of implementation in a generally favorable organizational context. This was accompanied by positive outcomes in terms of problems solved and improved perceptions. The internal change agents and the principal were highly committed to the program, and the staff appeared to have adopted a new mode of functioning. Professional problem solving, information exchange, and task interaction were increased. Final interview data reported an improvement in faculty cohesiveness and in the teachers' sense of "belonging to what was happening in the school." The principal reported an increase in trust among the staff and between the staff and the principal.

Table 7.2a

School Survey Data: Pre-Post Intervention T-tests: School B
(Pre-test N = 18, Post-test N = 18)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Client Relations					
School community relations	3.36	3.55	+		
Community influence	3.71	3.96	+	-1.69	(.10)
Community interest	3.28	3.50	+		
Students	3.71	3.86	+		
Internal School Relations					
Colleague relations	3.22	3.59	+		
Professional support	3.02	3.70	+	-2.36	(.03)
Staff integration	3.35	3.48	+		
Supervisory relations	3.49	3.88	+	-1.77	(.09)
Administrative practices	2.64	3.02	+		
Professional Climate					
Performance and development	3.07	3.32	+		
Faculty voice in educational program	2.61	3.25	+	-3.05	(.01)
Participation in program setting	2.88	3.47	+	-2.75	(.01)
Responsiveness to faculty	2.34	3.07	+	-2.97	(.01)
Facilities					
Materials and equipment	3.21	3.63	+	-1.85	(.07)
Building and facilities	2.04	2.75	+	-3.21	(.00)
Work Load					
Professional work load	3.29	3.14	+		
Non-professional work load	3.37	3.51	+		
School Performance					
Educational effectiveness	3.21	3.67	+	-2.87	(.01)
Evaluation of students	3.26	3.15	+		
Cognitive evaluation	3.17	3.02	-		
Student placement	3.31	3.33	+		
Special services	2.88	2.91	+		
Services for special children	2.92	3.03	+		
Services for staff and student improvement	2.71	2.90	+		

Table 7.2b

Evaluation Survey Data: Pre-Post Intervention T-tests: School B
(Pre-test N = 18, Post-test N = 18)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Environment					
Environmental influence on policy and programs					
Students	2.50	3.44	+	-2.43	(.02)
Teachers	3.61	4.12	+	-2.18	(.04)
Principals	4.44	4.24	-		
Central office	4.50	4.12	-	1.85	(.07)
Board of education	4.44	3.82	-	2.31	(.03)
Parents	3.44	2.88	-		
The AFT and affiliates	2.71	2.64	-		
State government	3.38	3.67	+		
Federal government	3.25	3.21	-		
Community agencies (police, fire, etc.)	2.71	2.07	-	2.01	(.06)
Organization Structure					
Standardization	4.24	4.40	+		
Autonomy	4.22	4.39	+		
Variety	4.10	4.48	+		
Hierarchy of authority	3.09	2.75	-	1.89	(.07)
Organizational Process					
Problem-solving process					
Evaluation	3.61	4.73	+	-3.18	(.00)
Solution generation	3.38	4.24	+	-3.23	(.00)
Internal diffusion	2.49	3.24	+	-2.07	(.05)
Legitimation	2.79	3.67	+	-3.36	(.00)
Adoption	3.14	3.75	+	-2.09	(.05)
Implementation	3.48	4.51	+	-4.06	(.00)
Routinization	3.42	4.22	+	-3.01	(.01)
Participation in decision making					
Actual participation in policy decisions	1.63	1.75	+		
Should participate in policy decisions	3.10	3.01	-		
Actual participation in operational decisions	3.59	3.54	-		
Should participate in operational decisions	4.24	4.37	+		

Table 7.2b (continued)

	X̄ pre	X̄ post	Change	t	Significance Level
Resource Allocation Process					
Amount of attention and resources					
1. Develop highly qualified staff	3.00	3.83	+	-2.89	(.01)
2. Implement comprehensive and integrated instructional program	3.25	3.78	+	-2.16	(.04)
3. To provide positive and supportive school environment	3.13	3.82	+	-2.48	(.02)
4. To provide on-going evaluation of school programs for modification and development	2.88	3.50	+	-2.09	(.05)
5. To experiment with educational innovations	2.81	3.17	+		
6. To be responsive to community	2.94	3.06	+		
7. To communicate to public objectives and results of school programs	2.69	2.83	+		
8. To promote educational achievement of minority students	3.35	3.71	+		
9. To coordinate school activities with relevant community groups	2.77	2.78	+		
10. To lessen disciplinary problems	3.59	3.56	-		
Organizationl Effectiveness					
Goal effectiveness					
1. Develop highly qualified staff	3.13	3.78	+	-2.25	(.04)
2. Implement comprehensive and integrated instructional program	3.40	3.56	+		
3. To provide positive and supportive school environment	3.27	3.56	+		
4. To provide on-going evaluation of school programs for modification and development	2.80	3.28	+		
5. To experiment with educational innovations	2.93	2.94	+		
6. To be responsive to community	2.80	3.00	+		
7. To communicate to public objectives and results of school programs	2.53	2.83	+		
8. To promote educational achievement of minority students	3.13	3.35	+		
9. To coordinate school activities with relevant community groups	2.88	2.72	-		
10. To lessen disciplinary problems	3.31	3.41	+		

Table 7.2b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Integration					
Role behavior					
Role overload	3.17	3.18	+		
Role ambiguity	2.41	2.20	-		
Job satisfaction					
Intrinsic satisfaction	4.63	4.99	+		
Contextual satisfaction	4.20	4.63	+		
Cohesiveness	4.45	4.80	+		

School C

Context

School C was one of the two smallest schools in our sample, with 14 full-time teachers and 358 students. The student body was composed of virtually all middle and upper-middle class white children.

Pre-test questionnaire data indicate that Cohesiveness and Colleague Relations in the school were about average for the district as a whole. Approximately one-third of the teachers were members of NEA, with no one belonging to the official bargaining unit, AFT. There was some alienation between primary and intermediate grade teachers reported in interviews and by comments written on the questionnaires. Although Colleague Relations did not measure particularly low on the questionnaire (the school ranked fifth among our sample), the faculty members were not a close-knit working team. They got together very infrequently, especially because the principal did not hold staff meetings.

Pre-test data indicate that this school was below the district average in five of the seven stages of the group problem-solving process, which is in contrast to the school's generally high pre-test data in most areas. Failure to evaluate problems, generate solutions, and implement and routinize changes relates to the principal's leadership style. He had a conscious policy of not passing information on to his subordinates because "it would only get them upset anyway," which resulted in the teachers being kept unaware of many central office decisions and policies. His policy of not holding faculty meetings, combined with his adamant support for self-contained classrooms and his refusal to allow any exchange of students between classrooms, contributed to the lack of professional interaction in the building. The interventionists were given the impression that not only was there little faculty problem-solving activity in the building, but that there was in many cases insufficient information for people even to be aware that there were any problems. The benign situation due to the rather docile and capable student body made it possible for this perception to persist.

Effort

During the first year of the project, School C held five meetings. Although there was 100 percent attendance and several problems were addressed, the teachers did not identify any pressing problems and discontinued meeting until the next year. During the second year, there were also five meetings, although two were limited to intermediate grade teachers because the topic area only involved them. One of the meetings was a feedback session for the second round of data, and at that time the faculty identified a topic area that they wanted to deal with in the next year. Although meetings were not frequent, the teachers did want to continue them.

Both the leader and the monitor reported spending one and one-half hours preparing for each meeting during the first year and about an hour per meeting during the second. Both utilized the training materials extensively. None of the other teachers volunteered to carry out any activities outside of meetings, so any extra program-related activities were carried out by the leader and the monitor.

Both the leader and the monitor liked their roles and wanted to continue into a third year. Because of the slow pace of the program in the school, they did not feel their role to be much of a burden. For this reason, and because no one else expressed interest in assuming a leadership role, there were no other teachers trained from School C.

Process

Although the program was not particularly vigorous in School C, its implementation conformed in many respects to the intended design. The leader and the monitor had a clear division of labor and a complementary and cooperative relationship. They utilized the training material extensively and implemented most of the components. Most forms were used regularly and Review Committee meetings were held after each Program Group meeting. There was no reason to convene a Policy Committee meeting, although two members of the central office were invited to two meetings as resource people. The data were fed back twice, with interest being relatively high both times.

Perhaps the main shortcoming of the implementation of the program in School C was that participants conformed more to the mechanics than to the spirit of the program. The group went through the motions but never really seemed to adopt a cooperative problem-solving mode of functioning. The seven-stage problem-solving process, for example, was often not completed. In several instances, the group stopped at the evaluation stage, and often group suggestions were aimed at symptoms with little effort expended to diagnose the problem. In some instances it seemed that the group simply did not have the information to really diagnose the problem. Group action often assumed the form of requests for actions or information from the principal, with the group itself not following up to see the problem through to solution.

The principal was also an obstacle to program functioning. He was not supportive or even particularly responsive to faculty problem-solving efforts. Interview data indicated that teachers in the school felt that he did not want to be bothered by their problems. Although he was not really hostile to or outspokenly against the program, he counteracted it in subtle ways, such as refusing to give credence to the teachers' willingness to work to improve things. However, he did make some changes as a result of requests from the Program Group. Perhaps a more aggressive Program Group that was willing to go through a systematic process and present organized, well-formulated statements of underlying problems and proposed solutions would have been better able to elicit cooperation from the principal.

Output

Problems. During the first year, four "solutions" were implemented by the Program Group in School C. The first was to install a coke machine in the teacher's lounge, an action which had always been vetoed by the principal previously because he thought it was too much trouble. However, with the group taking responsibility for maintenance of the machine and with the request coming from a unanimous group of teachers rather than isolated teachers, the principal, in his own words, "was schnookered" into accepting its installation.

The other three solutions were in the general area of internal relations. In order to increase the amount of information passed on to faculty members, the principal was asked to implement a weekly bulletin with scheduling information, policy decisions, and other information which affected them. In addition, a group of teachers was designated as an Agenda Committee, whose responsibility was to request faculty meetings with the principal when the teachers felt there were issues to be discussed. Finally, the faculty developed a communication form and procedures for exchanging memos between teachers, so that sender and receiver had a copy of important messages. Thus, the group had immediately tackled a major problem in the building, namely, communication.

During the second year, the teachers requested two changes which involved the building and facilities of School C. A pass system for visitors and locked doors during lunch were implemented. Also, the intermediate grade teachers addressed the problem of the lack of input into supplementary teaching materials for their reading program, and they held two meetings with district curriculum coordinators to talk about various materials and decide as a group which ones to request.

From the second round of feedback data, the teachers identified student behavior as an area on which to concentrate their group efforts during the next year.

Data. A summary of the data for School C appears in Tables 7.3a and 7.3b. It was characterized by few statistically significant changes. Many of the School Survey categories declined in favorability; only two general areas improved significantly. The faculty perceived themsleves as having gained more voice in the educational programs. In the evaluation data, this theme recurred. The teachers perceived teacher and student influence on policies to have increased, as well as that of various governmental bodies.

It is noteworthy that there was little improvement in the seven stages of the problem-solving process. Only Evaluation increased significantly, and some of the other areas showed a decline. This is an accurate reflection of the failure to utilize the OD program as a vehicle for going through a complete and systematic problem-solving process.

The data in School C became comparatively less favorable from the first to the second survey administration, in many cases showing an absolute decline. A viable explanation seems to be that as faculty members began to interact and evaluate their school, they became more aware that there were indeed problems to be addressed. In this case, the data and the program itself, by providing a "reality check," may have had the effect of "stirring up discontent" within a previously complacent faculty. This is not necessarily a bad effect, if the faculty will then become motivated to solve the problems. As of the end of the second year however, such motivation appeared doubtful.

In summary, there appeared to be a gradual unfreezing of the status quo in School C. Interview and survey data suggest that the teachers felt that they had increased influence, and there was evidence that teachers were beginning to work together more, including sharing materials and ideas, and the principal had begun to permit some exchange of students between classes. The leader, monitor, and principal all felt that the exchange of information in the school had increased, and all agreed that this was a beneficial program outcome. Whether the school can continue to utilize the OD program in the future, however, is unclear. Such utilization depends in part on assuming a more concerted, cooperative, and systematic decision-making process.

Table 7.3a

School Survey Data: Pre-Post Intervention T-tests: School C
(Pre-test N = 13, Post-test N = 16)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Client Relations					
School community relations	3.44	3.38	-		
Community influence	3.80	3.56	-		
Community interest	3.91	3.70	-		
Students	3.57	3.62	+		
Internal School Relations					
Colleague relations	3.26	3.30	+		
Professional support	3.36	3.29	-		
Staff integration	3.17	3.31	+		
Supervisory relations	3.13	3.33	+		
Administrative practices	2.28	2.88	+	-1.78	(.09)
Professional Climate					
Performance and development	2.68	2.93	+		
Faculty voice in educational program	2.07	2.73	+	-2.35	(.03)
Participation in program setting	1.88	2.72	+	-2.52	(.02)
Responsiveness to faculty	2.41	2.77	+		
Facilities					
Materials and equipment	2.97	2.88	-		
Building and facilities	3.12	3.20	+		
Work Load					
Professional work load	2.88	3.08	+		
Non-professional work load	3.56	3.53	-		
School Performance					
Educational effectiveness	3.53	3.47	-		
Evaluation of students	3.28	3.20	-		
Cognitive evaluation	3.55	3.40	-		
Student placement	3.07	3.16	+		
Special services	2.60	2.52	-		
Services for special children	2.58	2.82	+		
Services for student and staff improvement	2.78	3.05	+		

Table 7.3b

Evaluation Survey Data: Pre-Post Intervention T-tests: School C
(Pre-test N = 13, Post-test N = 16)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Environment					
Environmental influence on policy and programs					
Students	2.27	3.20	+	-1.80	(.09)
Teachers	2.55	3.27	+	-1.91	(.07)
Principals	4.27	4.13	-		
Central office	4.36	4.50	+		
Board of education	4.10	4.27	+		
Parents	2.73	3.20	+		
The AFT and affiliates	2.18	2.73	+		
State government	2.73	3.60	+	-2.04	(.05)
Federal government	2.64	3.81	+	-3.13	(.00)
Community agencies (police, fire, etc.)	2.19	2.40	+		
Organization Structure					
Standardization	3.90	4.15	+		
Autonomy	4.64	4.85	+		
Variety	4.04	4.54	+		
Hierarchy of authority	2.75	3.13	+		
Organizational Process					
Problem-solving process					
Evaluation	2.47	3.38	+	-1.98	(.06)
Solution generation	2.78	3.17	+		
Internal diffusion	2.88	2.69	-		
Legitimation	3.00	2.75	-		
Adoption	2.83	2.73	-		
Implementation	2.93	3.20	+		
Routinization	3.16	2.98	-		
Participation in decision making					
Actual participation in policy decisions	1.49	1.33	-		
Should participate in policy decisions	2.62	2.91	+		
Actual participation in operational decisions	3.82	3.54	-		
Should participate in operational decisions	4.22	4.42	+		

Table 7.3b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Resource Allocation Process					
Amount of attention and resources					
1. Develop highly qualified staff	3.46	3.33	-		
2. Implement comprehensive and integrated program	3.46	3.53	+		
3. To provide positive and supportive school environment	3.60	3.79	+		
4. To provide on-going evaluation of school programs for modification and development	2.91	3.27	+		
5. To experiment with educational innovations	2.82	3.13	+		
6. To be responsive to community	3.18	3.62	+	-2.29	(.03)
7. To communicate to public objectives and results of school programs	2.91	3.00	+		
8. To promote educational achievement of minority students	2.33	2.54	+		
9. To coordinate school activities with relevant community groups	2.60	2.54	-		
10. To lessen disciplinary problems	3.00	3.33	+		
Organizational Effectiveness					
Goal effectiveness					
1. Develop highly qualified staff	3.60	3.27	-		
2. Implement comprehensive and integrated instructional program	3.46	3.33	-		
3. To provide positive and supportive school environment	3.50	3.64	+		
4. To provide on-going evaluation of school programs for modification and development	2.82	2.87	+		
5. To experiment with educational innovations	2.89	3.07	+		
6. To be responsive to community	3.10	3.23	+		
7. To communicate to public objectives and results of school programs	3.00	3.20	+		
8. To promote educational achievement of minority students	2.67	2.39	-		
9. To coordinate school activities with relevant community groups	3.00	2.62	-		
10. To lessen disciplinary problems	3.46	2.67	-	2.17	(.04)

Table 7.3b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Integration					
Role behavior					
Role overload	3.23	3.02	-		
Role ambiguity	2.36	2.52	+		
Job satisfaction					
Intrinsic satisfaction	4.89	4.92	+		
Contextual satisfaction	3.83	4.22	+		
Cohesiveness	4.64	4.81	+		

School D

Context

School D had the largest staff of the elementary schools in our experimental sample, with 30 full-time teachers and 507 students. Approximately one-fifth of the students were minority, and a substantial portion of the student body was from lower income families. There was a large special education program in the school. Standardized test scores were at the midpoint of the 17 schools.

The pre-test School Survey data fell right at the district mean on most categories, the exceptions being lower scores on Administrative Practices, Non-professional Workload, and Supervisory Relations. The low score on the latter seemed to be a response to the principal's leadership style. A very hard working and dedicated man, the principal in School D had a high need to control his school and was fairly rigid about policies and procedures. A sizable segment of the faculty did not see eye to eye with him on many issues and found him difficult to deal with. This fact, combined with his basic "Theory X" assumptions about human behavior, resulted in the OD program being very threatening to him at a time when he was already bothered by the union-management feeling in the district and the militancy of the teachers.

Although School D was third highest in Colleague Relations, there did appear to be some conflict in the ranks. Variously described to us as "proactive" vs. "reactive," "old guard" vs. "young Turks" (although age did not seem to discriminate) and "pro-principal" vs. "anti-principal," there appeared to be a rift (or several rifts) within the faculty. Although we have no data to confirm it, this rift may have coicided with the Union-Association division within the building. During our entry process, the faculty met three times to decide whether to enter the program, and then decided by a one-vote margin to try it out.

School D started out below the district average on all of the seven stages of the problem-solving process. Interview data suggest that there was a lack of exchange of valid information in the school--people were not saying what they thought. As a result, it was hard to get the problems out on the table. The principal himself commented that people did not open up in faculty meetings.

In summary, the context in this school began as relatively non-supportive of the intervention. Nevertheless, there was a substantial element of the faculty that wanted to change this climate and was willing to expend quite a bit of energy, as we shall see in the next section.

Effort

During the first year of the project, School D held 12 meetings. The meetings were regularly scheduled for 7:30 a.m. and attendance was approximately 60 percent. The leader and monitor committed a great deal of time to the program (approximately two hours per meeting), reviewing training materials, communicating information to teachers who missed a meeting, planning meetings, and reviewing process notes. They received some assistance from teachers who volunteered to perform activities to help implement some of the group decisions.

A new leader and monitor were chosen for the second year, although the first year people were willing to continue if replacements could not be found. Their general feeling was that the more people in the school who received training, the more likely the program would be to continue in the future. The newly elected leader also committed a great deal of time to the program (four hours per meeting), although the new monitor was not particularly active and was somewhat disaffected.

During the second year, the 15 meetings were attended by approximately 60 percent of the faculty, with a core group of regulars and others joining the group from time to time. The leader spent a great deal of his time communicating information concerning the meetings to teachers who had been absent. The need to diffuse information among such a large faculty put an additional demand on the personnel in this school.

At the end of the second year, the faculty made the decision to continue the program into the following year with the same leader and monitor. An indication of effort, however, is that three additional teachers chose to attend the short version of training which was offered by the interventionists at the end of the 1975-76 school year. This means that seven teachers in the school received training.

Process

The program was implemented to a very high degree in School D. The change of leadership at the end of the first year made apparent the importance of leader-monitor teamwork. The first year leader and monitor worked together extremely closely, sharing perceptions, work, and feelings. This made it possible for them to keep going under some very difficult, conflict-laden situations. The lack of teamwork during the second year resulted in an admitted lowering of the morale of the leader, who was disappointed that his very high enthusiasm for the program was not shared as strongly by the monitor. The program indeed floundered for a large part of the second year, although other issues were involved, which will be discussed in the next section.

During both years, all the componenets of the program were utilized.

Supplemental measures were also developed, to increase internal diffusion of ideas among the faculty. The seven-step decision process was followed carefully both years. In fact, the first year leader commented that in many difficult situations she referred to the description of this process in order to make sense out of what was happening and to figure out what to do next.

The principal in School D cooperated fully with the Program Group, despite his admittedly negative feelings concerning the program. Interestingly, his feelings were indirectly responsible for many of the problems encountered by the group. A few of the teachers in the building were anxious to utilize this program as a way in which they could finally get around the principal, and they came to the meetings with some pent-up issues. The resulting aggressive stance of the group was discomfiting to others, who were personally much closer to the principal and did not think the group should function so aggressively. During the second year, after the principal had demonstrated his willingness to cooperate with the group (despite his own feelings about the program), the group spent a great deal of time searching for a "purpose," but now with the additional problem that many hard feelings existed between faculty members. The principal was very aware of the conflict between his teachers and was concerned about the resulting polarization. He was anxious that the program only continue if measures were taken to insure that the participating group members did not effectively disenfranchise other teachers.

A second feedback session was held in this school and, as with the first round of data, the teachers were interested in it. They tentatively identified some problem areas to begin the third year.

Output

Problems. During the first year, the group dealt with three problems in the areas of Building and Facilities and Non-professional Workload. In the former, a major effort consisted of altering space utilization in the building to free space for a teacher workroom. A second effort was to secure alterations in the playground area and parking facilities to alleviate unsafe conditions for children and parking lot jams at the beginning and end of the school day. In the area of Non-professional Workload, the teachers worked with the PTO to implement a volunteer clerical help program to run off dittos and do other non-teaching tasks for the teachers.

During the second year, the group began dealing with the same sort of contextual problem, including securing an additional phone for the social worker's new office and investigating the possibility of changing the lunch schedule (nothing came of the latter effort). With a very difficult transition, during which much philosophical and educational divisiveness surfaced, the group turned to matters more central to the educational process. Their final effort was to develop guidelines for the placement of students in classes from year to year, utilizing teacher recommendations more heavily than had previously been the case. According to interview data, the faculty on the whole seemed satisfied with this effort.

Data. All scales of the School Survey for School D improved in favorability (Table 7.4a). Significant improvements which occurred in Supervisory Relations and Voice in Educational Program can be attributed to the program itself. Non-professional Workload improved markedly, possibly reflecting the great reduction in the clerical work of teachers because of the parent volunteer system. The significant improvement in many of the School Performance scales does not appear to be directly tied to any of the problems solved, since the student placement procedures were not developed until after the second questionnaire administration.

In the evaluation data (Table 7.4b), significant increases occurred in five of the seven stages of the problem-solving process. The general increase in perceptions of resources allocated to the various goal areas and in Goal Effectiveness indicates a possible "halo effect," or a general improvement in teacher perceptions of their school.

In summary, it appears that despite the apparent fact that much latent conflict became manifest as a result of the OD program, the general attitudes of teachers in School D became more positive. The principal seemed satisfied that his influence had only temporarily declined and that both he and his teachers now had increased influence in the building. The teachers whom we interviewed felt that more valid information was being exchanged and that an atmosphere of increased trust and mutual respect, particularly between the principal and staff, was emerging. All parties seemed sensitive to the necessity of making the group representative of the entire faculty and the amount of time that was spent dealing with this issue is indicative of the extent to which the personnel in School D are actively trying to adapt the program to their particular situation.

Perhaps the most outstanding feature of the program in this school, and the reason why it continued, is that the program personnel (leaders and monitors) were all highly capable and understood the mechanisms and intent of the components of the program. The principal, in turn, put the welfare of his school before his own feelings and was able to enter into a cooperative working relationship with the Program Group.

Table 7.4a

School Survey Data: Pre-Post Intervention T-tests: School D
(Pre-test N = 25, Post-test N = 20)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Client Relations					
School community relations	3.22	3.43	+		
Community influence	3.75	3.83	+		
Community interest	3.06	3.16	+		
Students	3.47	3.67	+		
Internal School Relations					
Colleague relations	3.46	3.77	+		
Professional support	3.56	3.88	+		
Staff integration	3.37	3.69	+		
Supervisory relations	2.86	3.75	+	-2.75	(.01)
Administrative practices	2.70	2.93	+		
Professional Climate					
Performance and development	3.00	3.41	+	-1.75	(.09)
Faculty voice in educational program	2.39	3.20	+	-4.00	(.00)
Participation in program setting	2.34	3.53	+	-6.01	(.00)
Responsiveness to faculty	2.48	2.82	+		
Facilities					
Materials and equipment	3.37	3.60	+		
Building and facilities	2.89	3.02	+		
Work Load					
Professional work load	2.96	3.30	+		
Non-professional work load	2.85	3.58	+	-3.43	(.00)
School Performance					
Educational effectiveness	3.23	3.61	+	-1.86	(.07)
Evaluation of students	3.04	3.40	+	-2.22	(.03)
Cognitive evaluation	2.72	3.42	+	-2.97	(.01)
Student placement	3.29	3.46	+		
Special services	3.07	3.39	+		
Services for special children	3.19	3.33	+		
Services for student and staff improvement	2.78	3.39	+	-2.35	(.02)

Table 7.4b

Evaluation Survey Data: Pre-Post Intervention T-tests: School D
(Pre-test N = 25, Post-test N = 20)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Environment					
Environmental influence on policy and programs					
Students	2.32	2.90	+		
Teachers	3.42	3.60	+		
Principals	3.83	4.20	+		
Central office	4.29	4.55	+		
Board of education	4.25	4.20	-		
Parents	2.78	3.20	+	-1.68	(.10)
The AFT and affiliates	3.25	3.55	+		
State government	3.13	4.10	+	-3.28	(.00)
Federal government	3.04	3.70	+	-2.00	(.05)
Community agencies (police, fire, etc.)	2.26	2.68	+	-2.03	(.05)
Organization Structure					
Standardization	4.39	4.35	-		
Autonomy	3.95	3.98	+		
Variety	3.82	3.79	-		
Hierarchy of authority	3.75	3.64	-		
Organizational Process					
Problem-solving process					
Evaluation	2.73	3.97	+	-4.05	(0.00)
Solution generation	3.02	4.09	+	-4.37	(0.00)
Internal diffusion	2.47	3.02	+	-2.54	(.02)
Legitimation	2.57	2.97	+		
Adoption	2.83	3.17	+		
Implementation	3.08	4.04	+	-3.73	(.00)
Routinization	2.96	3.54	+	-2.43	(.02)
Participation in decision making					
Actual participation in policy decisions	1.51	1.58	+		
Should participate in policy decisions	2.96	2.99	+		
Actual participation in operational decisions	3.34	3.57	+		
Should participate in operational decisions	4.26	4.28	+		

Table 7.4b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Resource Allocation Process					
Amount of attention and resources					
1. Develop highly qualified staff	3.44	3.74	+		
2. Implement comprehensive and integrated program	3.30	3.65	+	-1.73	(.09)
3. To provide positive and supportive school environment	3.65	3.65	0		
4. To provide on-going evaluation of school programs for modification and development	3.00	3.40	+	-1.75	(.09)
5. To experiment with educational innovations	3.22	3.30	+		
6. To be responsive to community	2.87	3.30	+	-1.74	(.09)
7. To communicate to public objectives and results of school programs	2.50	3.10	+	-2.35	(.02)
8. To promote educational achievement of minority students	3.04	3.55	+	-2.38	(.02)
9. To coordinate school activities with relevant community groups	2.52	3.05	+	-2.07	(.05)
10. To lessen disciplinary problems	3.30	3.74	+		
Organizational Effectiveness					
Goal effectiveness					
1. Develop highly qualified staff	3.35	3.63	+		
2. Implement comprehensive and integrated instructional program	3.00	3.30	+	-1.67	(.10)
3. To provide positive and supportive school environment	3.44	3.55	+		
4. To provide on-going evaluation of school programs for modification and development	2.78	3.00	+		
5. To experiment with educational innovations	2.91	3.00	+		
6. To be responsive to community	2.74	3.15	+		
7. To communicate to public objectives and results of school programs	2.50	2.95	+	-2.04	(.05)
8. To promote educational achievement of minority students	2.70	3.35	+	-2.96	(.01)
9. To coordinate school activities with relevant community groups	2.70	2.95	+		
10. To lessen disciplinary problems	2.87	3.26	+		

Table 7.4b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Integration					
Role behavior					
Role overload	2.81	2.88	+		
Role ambiguity	2.49	2.23	-		
Job satisfaction					
Intrinsic satisfaction	4.50	4.80	+		
Contextual satisfaction	4.17	4.60	+		
Cohesiveness	4.71	4.90	+		

School E

Context

School E was one of the smaller schools in our sample, with 16 teachers and 361 students. The student body was 94 percent white and most students came from middle and upper-middle class homes. Standardized test scores in this building were the highest in the district.

On the first School Survey administration, School E's average was very close to the average for the district in all but two categories. The lowest was Colleague Relations, and interview data confirms that there was a lack of collegiality in the school, with teachers interacting very little and showing almost no personal or professional interest in one another. Teachers in School E had an average of 18 years of teaching experience and almost 10 years in School E itself, both of which were the highest in our sample. Interview evidence indicates that younger and/or more recently arrived teachers were anxious to establish more professional interaction but that there was a hard core of teachers who had settled into a pattern of keeping to themselves and not "rocking the boat." This school was also characterized by a division between AFT and NEA members.

Despite the high rank on standardized tests, the teachers ranked their school lower than the district norm on all measures of educational effectiveness. The teachers also scored lower than the district norm on measures of both intrinsic and contextual satisfaction. Coupled with its very low scores on the seven stages of the group problem-solving process (it was the second lowest of our sample and below district norms on all seven stages), these scores ostensibly indicate that the school was not performing adequately in terms of its own potential, the needs of its staff, or the need for a continual solving sequence. During the second year, other teachers became more active in carrying out solution-related activities outside the meetings.

Process

The degree of implementation of the program in School E was mixed. During the first year, a lack of teamwork by the leader and monitor was also associated with haphazard use of some of the components of the OD program. The leader and monitor each found it difficult to work with the other, and as a result never really clarified their roles with one another. Both were committed to the program, however, and they managed to keep it going despite the unusually difficult group process problems which were a manifestation of the poor colleague relations in the school. The leader especially had a good understanding of the seven-stage problem-solving process.

The first year leader was a new teacher in the building and was not well received by the "old guard" of the school. (Their candidate had been defeated for the job.) She had a very forceful personality as well as a strong will; and although her persistance helped the group to survive start-up difficulties, she realized that her leadership also caused difficulties for the program in the school.

The principal, although never particularly negative towards the program, was uncomfortable by the extent to which it had resulted in latent conflict becoming manifest. He cooperated with the program but could not be described as particularly supportive of it.

The second-year leader and monitor were more neutral in the eyes of the faculty and were able to bring the faculty together to a greater extent. They developed a polling system to get input into decisions from all teachers as a way to include non-particpants in group decisions. Their close teamwork evaluation and upgrading of educational practices.

Supervisory Relations was the other School Survey category in the pretest which measured quite a bit below the district average. The principal had come up through the ranks in School E, and interview data indicate that many teachers felt that a small group of teachers who had been in the building for a long time had an "inside track" to the principal which had become formalized by their control of the Faculty Advisory Council in the school. The principal himself seemed to follow a strategy of not making waves, and many teachers did not feel he was very open to suggestions for changes. Although in our interactions with him he seemed open to the goals of the OD program, the net result of his leadership style gave the appearance of "Theory X" assumptions. Some teachers did not feel that their opinions counted or that much concern was shown for their own needs as teachers or people.

Effort

During the first year of the project, School E held seven meetings. Although attendance was high at the first three released-time meetings, it quickly dropped off to a small group of regular participants, consisting of approximately 50 percent of the faculty. During the second year, there were 13 meetings, with the core group continuing steady attendance and other faculty members coming from time to time.

The first-year leader and monitor both reported committing about two additional hours to each Program Group meeting, and both relied heavily on use of the materials. A new leader and monitor were elected and trained for the second year, and they also spent a good deal of time on the project (one half to one and one half hours per meeting plus time spent in regularly scheduled Review Committee meetings). They also utilized the materials regularly to aid in understanding group processes and in guiding the problem-

and energetic commitment to the program, combined with adherence to a systematic change process and use of all the components, resulted in a very high degree of implementation of the spirit and mechanics of the OD program.

Even success had its problems in this school, however, and toward the end of the second year there was a perhaps inevitable confrontation between the Faculty Advisory Committee and the Program Group. The faculty at this point made it clear that they wanted the Program Group to continue. The leader and monitor began making Program Group reports at faculty meetings. This became another mechanism for integrating the Program Group's efforts into the existing authority structure in the school and making non-participants feel they were represented by the Program Group.

A final concern of the leader and the monitor was that the teachers chose not to spend time to look at the second round of data. The response rate was very low for the second administration of the surveys, and the group participants refused to accept the data as representative of the feelings of the faculty. The leader and the monitor were planning a series of "mini-questionnaires" for the next year, to get up-to-date perceptions and to provide an opening for considering some of the data from the School Survey.

Output

Problems. The first problem solution was an itemized list of instructional materials which had been collected by each teacher to facilitate sharing when desirable. This occurred during the first three released-time meetings, which were also spent dealing with the large amount of conflict and hard feelings which were emerging. A much smaller group stuck with the program for the rest of the year, discussing the problem of poor colleague relations in their school and trying to become a nucleus of increased professional interaction. Recognizing that one of the reasons that their Program Group had been so conflictive was that many teachers did not know or like one another, this group organized a series of potluck lunches to serve as an informal chance to interact. Attendance at these lunches grew steadily, although at first a small group of teachers tried to get rid of them, arguing that such get-togethers were "unprofessional."

The potluck lunches continued throughout the second year and became a part of the normal routine. By the second year, teachers had become somewhat more accustomed to working together. With its somewhat low-key but very competent leadership, the Program Group became very active, starting out with simpler problems and proceeding to more complex ones. It worked with the principal to obtain keys to older, unlocked classrooms. Not having keys prevented the teachers from storing valuable materials and equipment. The Program Group also worked with the principal to develop a system that gave teachers access to the buildings on weekends.

In matters more closely related to education, three major problem areas were addressed. First, the Program Group devised a system for professional interaction in the selection of a new math series for the school to replace the usual system of voting without ever holding discussions. Several teachers visited other schools which were using various texts and came back to report to the other teachers in their building. Three afternoons were set aside to meet and look through and discuss the materials before a decision was made.

Dissatisfaction with the psychological services in the building resulted in the group inviting the Associate Superintendent for Special Services in to discuss their needs in terms of psychological services, his view of the services the school should be receiving, and the job the present psychologist was doing. This meeting contributed to the psychologist's eventual release and replacement by the district.

The final product of the Program Group was the development of a systematic procedure for recording a child's end-of-the-year reading ability and passing test information on to his/her teacher for the next year.

In addition to these actions, the Program Group in School E also became responsive to suggestions from the principal, took up a few matters which he suggested and, in one instance, after polling the faculty to determine their feelings, decided not to deal with another area with which he was concerned. It is clear that the group had become a force in the school, even if not a totally welcome one.

Data. Keeping in mind the greatly reduced response rate, we will nevertheless examine the data (Tables 7.5a and 7.5b) to see what, if any, patterns can be detected. In general, the mixed nature of the data reflects the mixed nature of the effects of the program in School E. In the School Survey, the major significant increase was in Voice in Educational Program and its subscales. Educational Effectiveness also improved. Other scales showed little improvement and six scales moved in the direction of decreased favorability.

Evaluation data showed little change in Environment. A significant structural change was an increase in Hierarchy of Authority, accompanied by a decrease (although not significant) in Autonomy.

The seven-stage problem-solving process did not change significantly. The Internal Diffusion stage was the only one to decrease, once again reflecting the problems of colleague relations in the school. Two areas were perceived as receiving a higher amount of resources: (1) To Implement a Comprehensive and Integrated Instructional Program and (2) To Provide On-going Evaluation of School Programs. Again indicative of the mixed effects of the program in this school, all five of the scales indicating Integration of the Individual in the Organization decreased in favorability.

It should be pointed out that the final round of data was collected in February 1976. Interviews with the leader and the monitor in May indicated that colleague relations were beginning to improve by then and that people were beginning to open up and say what they thought both in faculty meetings and in the school in general. Both felt that the flow of information was much improved in the school and that teachers were beginning to see themselves as a legitimate problem-solving group.

The principal continued to be unhappy that colleague relations had not improved as a result of the program. It is of course regrettable that there was still a segment of the teachers who were not happy about the OD program. However, for those who were participating, this effort seemed to carry with it the possibility of making changes to greatly improve the professional climate in the building where they worked.

Table 7.5a

School Survey Data: Pre-Post Intervention T-tests: School E
(Pre-test N = 14, Post-test N = 9)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Signficance Level
Client relations					
School community relations	3.27	3.54	+		
Community influence	3.31	3.70	+		
Community interest	3.54	3.56	+		
Students	3.78	3.59			
Internal School Relations					
Colleague relations	2.45	2.50	+		
Professional support	2.33	2.48	+		
Staff integration	2.56	2.52	-		
Supervisory relations	3.13	3.14	+		
Administrative practices	2.64	3.11	+		
Professional Climate					
Performance and development	2.71	2.92	+		
Faculty voice in educational program	2.35	3.33	+	-3.49	(.00)
Participation in program setting	2.54	3.44	+	-2.56	(.02)
Responsiveness to faculty	2.35	3.22	+	-2.30	(.03)
Facilities					
Materials and equipment	3.36	3.25	-		
Building and facilities	3.15	3.26	+		
Work Load					
Professional work load	2.55	3.07	+		
Non-professional work load	3.28	3.54	+		
School Performance					
Educational effectiveness	3.21	3.69	+	-1.72	(.10)
Evaluation of students	3.32	3.24	+		
Cognitive evaluation	3.39	3.00	-		
Student placement	3.18	3.48	+		
Special services	3.03	3.09	+		
Services for special children	3.30	3.15	-		
Services for student and staff improvement	2.92	2.85	-		

Table 7.5b

Evaluation Survey Data: Pre-Post Intervention T-tests: School E
(Pre-test N = 14, Post-test N = 9)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Environment					
Environmental influence on policy and programs					
Students	2.09	2.78	+		
Teachers	3.09	3.44	+		
Principals	4.00	4.22	+		
Central office	4.22	4.22	0		
Board of education	4.36	4.44	+		
Parents	3.09	2.89	-		
The AFT and affiliates	3.09	2.89	-		
State government	3.64	3.56	-		
Federal government	3.40	3.67	+		
Community agencies (police, fire, etc.)	2.35	2.78	+		
Organization Structure					
Standardization	3.20	4.22	+		
Autonomy	4.23	3.78	-		
Variety	4.03	3.71	-		
Hierarchy of authority	3.28	4.17	+	-2.84	(.01)
Organizational Process					
Problem solving process					
Evaluation	3.10	3.42	+		
Solution generation	3.02	3.39	+		
Internal diffusion	2.70	2.42	-		
Legitimation	2.76	3.22	+		
Adoption	2.81	3.22	+		
Implementation	2.96	3.37	+		
Routinization	3.08	3.53	+		
Participation in decision making					
Actual participation in policy decisions	1.44	1.71	+		
Should participate in policy decisions	3.00	2.84	-		
Actual participation in operational decisions	3.31	3.62	+		
Should participate in operational decisions	4.27	4.20	-		

Table 7.5b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Resource Allocation Process					
Amount of attention and resources					
1. Develop highly qualified staff	3.20	3.78	+		
2. Implement comprehensive and integrated instructional program	3.00	4.00	+	-2.40	(.03)
3. To provide positive and supportive school environment	3.27	3.67	+		
4. To provide on-going evaluation of school programs for modification and development	2.64	3.56	+	-2.43	(.03)
5. To experiment with educational innovations	3.09	2.89	-		
6. To be responsive to community	2.91	3.44	+		
7. To communicate to public objectives and results of school programs	3.00	3.33	+		
8. To promote educational achievement of minority students	3.18	3.33	+		
9. To coordinate school activities with relevant community groups	2.44	2.89	+		
10. To lessen disciplinary problems	3.18	3.22	+		
Organizational Effectiveness					
Goal effectiveness					
1. Develop highly qualified staff	2.90	2.89	+		
2. Implement comprehensive and integrated instructional program	2.90	3.11	+		
3. To provide positive and supportive school environment	3.18	3.22	+		
4. To provide on-going evaluation of school programs for modification and development	2.64	2.89	+		
5. To experiment with educational innovations	2.91	2.33	-	1.82	(.09)
6. To be responsive to community	2.70	3.00	+		
7. To communicate to public objectives and results of school programs	2.70	3.00	+		
8. To promote educational achievement of minority students	2.82	2.67	-		
9. To coordinate school activities with relevant community groups	2.67	2.78	+		
10. To lessen disciplinary problems	2.91	3.22	+		

Table 7.5b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Integration					
Role behavior					
Role overload	2.85	3.19	+		
Role ambiguity	2.29	2.44	+		
Job satisfaction					
Intrinsic satisfaction	4.55	4.42	-		
Contextual satisfaction	4.15	4.14	-		
Cohesiveness	3.82	3.38	-		

School F

Context

School F was one of the larger schools in our sample, with 22 full-time teachers and 522 students. The student body was almost entirely white, with a large component being from lower-middle class housing developments. Standardized test scores were slightly below both the district average and the national norm.

Pre-test School Survey data were generally right at or slightly below the district average, although several categories were considerably lower. Supervisory Relations was particularly low in comparison to the district average. The principal had a self-described leadership style which was highly authoritarian. He did not believe that faculty had any authority to make decisions, and he perceived some of the teachers in his buidling as troublemakers. Teachers described him as being highly rigid about procedures, demanding uniformity in most practices and making changes and decisions without consulting anyone. School F was above the district norm on both Hierarchy of Authority and Standardization scores.

This leadership style had a negative effect on the faculty, which was composed of very forceful, outspoken and divergent personalities. The Colleague Relations and Cohesiveness scores for this faculty were fourth highest in our sample of eight participating schools. This reflected the fact that there was already quite a bit of professional interaction in the school. However, there seemed to be several subgroups of individuals with little communication between the groups. Interviews in this school were strange to report, for perceptions differed so greatly that at times it appeared that people were describing very different events. Nevertheless, it was a very active faculty. One teacher who had been transferred from School F to a new school the year the OD program began described the faculty at School F as "alive and vibrant."

School F was the fourth highest in our sample on the pre-test measures of the existence of problem-solving activity in the school. The only stage of the seven-stage problem-solving process on which it scored above the district average was Routinization. There did not seem to be much faculty input into the early stages of the problem-solving process, and Evaluation of problems was especially low.

Thus, although it was in the top half of our sample in both Colleague Relations and the Problem-solving Process, the problem of integrating the diverse elements of the faculty and gaining the principal's acceptance of increased faculty decision making would be considerable.

Effort

Six meetings were held in School F during the first year of the program, with about 75 percent of the faculty attending. Both the leader and the monitor reported spending upwards of one half hour per meeting in addition to time spent in the meeting itself and both used the materials a lot. The monitor did not want to continue into the second year, and a new monitor was elected and trained. The 12 meetings during the second year continued to have about 75 percent attendance. The new monitor put quite a bit of time into some of the activities planned by the Program Group, but less time into referring to the materials and working on improving the functioning of the program itself.

During the second year a large number of teachers became involved in activities related to Program Group projects. However, there was a group of teachers who remained passive participants in the Program Group or did not participate at all. The leader and the monitor both stepped down after the second year, in hopes that a change of leadership would bring more teachers into the Program Group. Two more teachers attended the short training session held at the end of the second year.

Process

An overall characterization of the implementation of the program in School F is that there was a good deal of activity but very little of it conformed to the guidelines provided by the interventionists. There was in fact an apparent alienation from the process and structure of the program.

The leader was very enthusiastic but was controversial in the school, as she had been outspoken on many issues. In a school which housed many of the NEA leaders, the Program Group leader was a member of the AFT and was identified in many people's eyes with a subgroup of the faculty. Although she wanted very badly to provide an open forum in which faculty could overcome their divisions and start to work together in a united manner, many faculty members did not feel comfortable speaking out, some chose not to come to meetings at all, and the same vocal group continued to dominate discussions.

The nature of the faculty was at least partly responsible for the incomplete program implementation. They were a highly contentious group; for instance, the leader and the monitor both reported that the group refused to look at most of the feedback data because they got so bogged down arguing about its validity. They were not the least bit interested in having a second feedback session the following year.

They also tended to be an impatient group, preferring action to talk, and showed little interest in altering their mode of group functioning. The leader was very frustrated that she could not get them to follow the seven-stage problem-solving process at all. The leader indicated that she often carried out the steps herself outside of the meeting, which the Program Group had dismissed as a waste of time in the meeting.

Part of the problem lay with the failure to achieve any real teamwork between the leader and the monitor. The monitors each year did only a partial job of filling out the forms and providing group process assistance, a fact which was upsetting to the leader, who truly wanted to begin to improve group functioning. Another problem seemed to be the unwillingness of the teachers to accept leadership from within their own ranks. The people interviewed in School F continually said that they thought things would be better if the interventionists could come to a meeting and "tell the faculty about group process and problem-solving steps so they would listen."

Another factor which undoubtedly contributed to the low degree of implementation was the principal's attitude. Although he had mellowed a bit by the end of the second year, he seemed to be highly threatened by the OD program throughout and frankly felt it did nothing but create problems in his school. The failure to follow program guidelines designed to keep the principal informed of Program Group activities was a contributing factor. The leader and the monitor relied on verbal presentations rather than systematic written notes. This led to the principal claiming that there never were any Review Committee meetings, although interviews with three different teachers indicated that such meetings were held and that the principal was very cooperative on all issues.

Undoubtedly, the principal's perceptions were influenced by his negative attitude toward the program. He definitely perceived the Program Group as an antagonistic situation, constantly referring to "them" (the teachers) or "me," and never reporting a willing cooperation. He resented being asked to include the meetings in his daily announcements, saying that if "they want to do something as a faculty they shouldn't ask me to give the weight of my authority to the meetings." He believed that only a few teachers were involved in the program.

Output

Problems. During the first year, the Program Group compiled a list of community resources that could be used to help students who had special needs or problems. The group spent the remaining meetings discussing the need to deal constructively with behavior problems by developing programs to reward good citizenship. They were concerned that their school was not providing opportunities for positive reinforcement to students who did not happen to excel academically.

This concern was carried over to the second year, when the major concern of the group was to implement a year-long, school-wide emphasis on citizenship, including a poster contest, student-generated citizenship goals, classroom emphasis on government and citizen responsibilities, two special assemblies, and a "walk-a-thon" to earn money for citizenship awards and to buy needed equipment for the school.

Additional areas with which the Program Group dealt were developing procedures for running off dittos and a system for locating supplemental reading materials to increase their accessibility to all teachers.

Data. The data for School F were relatively unchanged from the first to the second survey administration (Tables 7.6a and 7.6b). The only statistically significant changes in the School Survey scales were an increase in Voice in Educational Program and a decrease in Non-professional Workload. The latter reflected feelings not related to the OD program. Specifically, a topic of major discontent in School F was that the new curricula in the district demanded too much bookkeeping, thereby reducing the amount of time teachers could spend preparing for and carrying out their instructional function.

The evaluation data were mixed, with very few significant changes in either direction. The only significant change in the seven-stage problem-solving sequence was an increase in Evaluation of problems. This reflects the failure of the group to go through these stages, despite the identification of problems.

In summary, although there was a lot of activity associated with the OD project in School F, little development of the organization actually occurred. The faculty adapted the program to its pre-existing mode of functioning. Small informal groups carried out much of the activity, and divergent viewpoints were not integrated. Had the group been willing to take the time to work more systematically, perhaps more of the faculty would have felt ownership over its projects. As it was, the considerable energy and enthusiasm in the faculty remained largely unharnessed and working at cross purposes.

Table 7.6a

School Survey Data: Pre-Post Intervention T-tests: School F
(Pre-test N = 22, Post-test N = 16)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Client Relations					
School community relations	3.22	3.21	-		
Community influence	3.67	3.73	+		
Community interest	3.02	3.19	+		
Students	3.27	3.41	+		
Internal School Relations					
Colleague relations	3.32	3.28	-		
Professional support	3.59	3.46			
Staff integration	3.05	3.13	+		
Supervisory relations	3.05	3.42	+		
Administrative practices	2.65	2.42	-		
Professional Climate					
Performance and development	2.94	3.12	+		
Faculty voice in educational program	2.37	2.79	+	-1.83	(.08)
Participation in program setting	2.50	2.90	+		
Responsiveness to faculty	2.30	2.50	+		
Facilities					
Materials and equipment	2.86	2.87	+		
Building and facilities	2.44	2.81	+		
Work Load					
Professional work load	2.92	2.71	-		
Non-professional work load	3.80	3.18	-	3.16	(.00)
School Performance					
Educational effectiveness	2.99	3.26	+		
Evaluation of students	3.13	3.12	+		
Cognitive evaluation	2.86	3.10	+		
Student placement	3.32	3.19	-		
Special services	2.78	3.12	+		
Services for special children	2.97	3.21	+		
Services for student and staff improvement	2.70	2.78	+		

Table 7.6b

Evaluation Survey Data: Pre-Post Intervention T-tests: School F
(Pre-test N = 22, Post-test N = 16)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Environment					
Environmental influence on policy and programs					
Students	1.95	2.44	+		
Teachers	3.38	3.13	-		
Principals	4.10	3.94	-		
Central office	4.29	4.53	+		
Board of education	4.81	4.40	-	1.95	(.07)
Parents	2.95	2.87	-		
The AFT and affiliates	3.29	2.71	-	1.83	(.08)
State government	3.15	3.60	+		
Federal government	3.24	3.40	+		
Community agencies (police, fire, etc.)	2.34	2.20	-		
Organization Structure					
Standardization	4.38	4.62	+		
Autonomy	4.08	4.33	+		
Variety	4.24	4.71	+		
Hierarchy of authority	3.75	3.80	+		
Organizational Process					
Problem-solving process					
Evaluation	3.07	3.56	+	-1.73	(.09)
Solution generation	3.43	3.53	+		
Internal diffusion	2.57	2.93	+		
Legitimation	2.56	3.00	+		
Adoption	2.85	3.11	+		
Implementation	3.32	3.33	+		
Routinization	3.57	3.55	-		
Participation in decision making					
Actual participation in policy decisions	1.56	1.68	+		
Should participate in policy decisions	3.17	3.19	+		
Actual participation in operational decisions	3.48	3.64	+		
Should participate in operational decisions	4.49	4.38	+		

Table 7.6b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Resource Allocation Process					
Amount of attention and resources					
1. Develop highly qualified staff	3.67	3.47	+		
2. Implement comprehensive and integrated instructional program	3.52	3.73	+		
3. To provide positive and supportive school environment	3.33	3.60	+		
4. To provide on-going evaluation of school programs for modification and development	2.85	3.14	+		
5. To experiment with educational innovations	3.40	3.07	-		
6. To be responsive to community	3.05	3.20	+		
7. To communicate to public objectives and results of school programs	2.43	2.87	+	-1.84	(.08)
8. To promote educational achievement of minority students	2.91	2.93	+		
9. To coordinate school activities with relevant community groups	2.90	2.53	-		
10. To lessen disciplinary problems	3.50	3.73	-		
Organizational Effectiveness					
Goal effectiveness					
1. Develop highly qualified staff	3.43	3.33	-		
2. Implement comprehensive and integrated instructional program	3.38	3.20	-		
3. To provide positive and supportive school environment	3.10	3.13	+		
4. To provide on-going evaluation of school programs for modification and development	2.68	3.00	+		
5. To experiment with educational innovations	3.10	3.00	-		
6. To be responsive to community	2.81	2.87	+		
7. To communicate to public objectives and results of school programs	2.52	2.73	+		
8. To promote educational achievement of minority students	2.81	2.67	-		
9. To coordinate school activities with relevant community groups	2.86	2.60	-		
10. To lessen disciplinary problems	3.05	3.07	+		

Table 7.6b (continued)

	$\bar{X}$ pre	X post	Change	t	Significance Level
Integration					
Role behavior					
Role overload	3.27	3.54	+		
Role ambiguity	2.49	2.31	-		
Job satisfaction					
Intrinsic satisfaction	4.69	5.00	+		
Contextual satisfaction	4.27	4.59	+		
Cohesiveness	4.65	4.79	+		

School G

Context

School G was one of the larger schools in our sample, with 22 teachers and 525 students. Its student body was mostly lower and lower-middle class students, racially integrated, and there was a large population of Spanish-speaking students, some of whom were transients. The school had a large bi-lingual program. Its standardized test scores were in the bottom third of the district and below the national norms.

School G ranked second lowest of the participating schools on the School Survey pre-test data as a whole. It only fell above the district average in one category, Colleague Relations, on which it was the highest in our sample. Similarly high scores on the Cohesiveness scale and interview data confirm the presence of a great deal of professional and friendly interaction among the faculty in the school. Like School F, the faculty in School G was composed of very strong and diverse personalities as well as individuals from both of the teachers' union organizations. However, in School G teachers got along much better together.

The Supervisory Relations category began slightly below the district average. The principal had formerly been a teacher in the same building and was generally well liked. However, there was some feeling that he was not strong enough in pushing for the needs of the building with the central office. In general, his leadership philosophy was compatible with the nature of the intervention. He was one of the most receptive principals to the principal training and reported in two different interviews that he had gotten ideas from that training which helped him make some beneficial changes in the way he did things. He appeared to welcome the chance to increase faculty involvement in decision making and to improve the functioning of the school.

School G was one of the three highest in our sample on the existence of problem-solving activities at the beginning of the program. However, its high scores on most of the seven-stage problem-solving process contrasted with its low scores on the Legitimation subscale. There was a feeling on the part of the faculty in School G that the administration was the barrier to making necessary improvements and changes.

Effort

School G had four meetings during the first year of the program, with 90 percent of the faculty attending. The leader and the monitor each reported spending about an hour outside of each meeting on the program and using the materials as a guide. None of the other teachers carried out any Program Group related activities outside of the meetings. The leader and the monitor became discouraged by the failure of the central office to respond positively to a request from the Program Group and did not call any more meetings. Both were very active and ambitious individuals, and it is questionable whether their role in the OD program was a very high priority for either of them.

During the second year, the leader reviewed his materials and held a complete feedback session of the second round of data. That was the sole OD activity that year.

Process

The OD program was only partially implemented in School G. The leader and the monitor did not coordinate their roles, and many of the components, such as the process and communication forms, were not regularly used. Although two problems were quickly solved, and the solutions eventually were routinized, the staff did a superficial job of analyzing a third problem, with the result that there was little to show for their efforts. The Program Group simply did not go through a systematic problem-solving sequence.

The principal cooperated fully with the group efforts and seemed happy with the solutions that they implemented. At the same time that his faculty was giving the OD program a try, he himself was utilizing much of the material from training to improve the quality of faculty meetings and turn them into a forum for systematic problem solving.

Interestingly, School G utilized the data feedback components of the OD program to a greater extent than any other school. The principal himself found the data very helpful, particularly because it pointed to areas where he needed to convey more information to his faculty. In addition, there was a high degree of faculty interest in the data, especially in the second set of data fed back. A full-fledged feedback meeting was held where all the data was presented and the faculty and principal together picked out an area to which they wanted to devote major faculty attention in the upcoming year.

In interviews at the end of our involvement with the district in May 1976, the leader, monitor and principal all pointed out that the OD concept had not died at School G and that many of the ideas were still being used. The teachers apparently had gained a sense that they did have the right to participate in many decisions and were exercising that right in faculty meetings. Indeed, the questionnaire data, which will be discussed below, indicated that teachers in School G felt that their organization had improved. Although the concept of a Program Group did not take hold, it is possible that the OD program was adapted to the particular situation in School G, and that the forum for increased professional problem solving was the regular faculty meeting.

Output

Problems. The Program Group in School G implemented two solutions in the general area of intra-school communications. They devised a routing system to pass information around to all teachers in a systematic manner. They also instituted a very complete school calender to provide itinerant teachers with information about what was going on in the school and to enable teachers to better coordinate activities.

The third problem area, the inability of special services to meet the needs of the large numbers of students in the building with special learning problems, was the downfall of the Program Group. The solution chosen was to request more special services from the district office. The letter which was sent to the district office making that request was answered with a firm but polite refusal, stating that the budget did not have additional funds for this purpose. Instead of considering what to do next, the group simply stopped meeting. Ironically, the principal told us that more special services were assigned to School G for the following school year, partly as a result of the letter from the Program Group.

Data. The data for School G appear in Tables 7.7a and 7.7b. There was a definite increase in favorability in the post-test data. The primary areas of improvement in the School Survey data were the scales and subscales regarding Internal School Relations, Professional Climate, Work Load, and School Performance. The jump of approximately one point in both the Supervisory Relations and Voice in Educational Program categories gives credence to interview information pointing to the principal's efforts to have a more fully informed faculty and to involve his faculty more in decision making.

There was also a great deal of change in the evaluation data. In

Environment, teachers perceived students and teachers as well as various government groups to have greater influence on policies and programs. In the general area of Organization Structure, Standardization increased and Hierarchy of Authority decreased. Five of the seven problem-solving stages increased significantly while Legitimation did not show much improvement. This may indicate that the faculty still perceived administrative barriers to problem solving. The teachers at School G perceived themselves as having significantly more participation in operational (instructional) decisions. Teachers perceived an increase in resources allocated to many goals, most particularly those pertaining to the educational program of the school and the particular need at School G to deal with minority and low-achieving students. The school was also perceived to be more effective in many of these areas. Finally, Integration of the teachers with the organization improved. The teachers reported less Role Ambiguity and higher Intrinsic and Contextual Satisfaction.

Although there is room to doubt whether things really did get that much better in School G, and especially whether the improvement was an outcome of the OD project, it seems safe to say that the attitudes of teachers towards their work environment certainly had improved. What happened in School G is evidence that the processes embodied in the intervention can work even in a modified structure. It appears that there is room for an individual school to adapt the OD program's structure to its own preferred mode of functioning. Therefore, while for program evaluation purposes we must offically judge the OD program to have terminated in School G, it is possible that the effects of the program in this school may last much longer due to the alterations in the functioning of the authority system in the school.

Table 7.7a

School Survey Data: Pre-Post Intervention T-tests: School G
(Pre-test N = 19, Post-test N = 19)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Client Relations					
School community relations	2.92	3.31	+		
Community influence	3.30	3.75	+		
Community interest	2.87	3.29	+		
Students	2.92	3.42	+	-1.96	(.06)
Internal School Relations					
Colleague relations	3.96	4.39	+	-2.36	(.03)
Professional support	4.07	4.41	+	-1.97	(.06)
Staff integration	3.86	4.36	+	-2.64	(.01)
Supervisory relations	3.04	4.09	+	-3.37	(.00)
Administrative practices	2.07	2.75	+	-2.71	(.01)
Professional Climate					
Performance and development	2.50	3.59	+	-4.21	(.00)
Faculty voice in educational program	2.12	3.05	+	-5.86	(.00)
Participation in program setting	2.08	3.21	+	-5.16	(.00)
Responsiveness to faculty	2.17	2.94	+	-3.67	(.00)
Facilities					
Materials and equipment	3.14	3.29	+		
Building and facilities	2.24	2.56	+		
Work Load					
Professional work load	2.63	3.35	+	-2.97	(.01)
Non-professional work load	3.15	3.83	+	-2.30	(.03)
School Performance					
Educational effectiveness	2.89	3.53	+	-2.47	(.02)
Evaluation of students	2.72	3.23	+	-2.06	(.05)
Cognitive evaluation	2.58	2.80	+		
Student placement	2.90	3.49	+	-2.37	(.03)
Special services	2.30	2.60	+		
Services for special children	2.28	2.42	+		
Services for student and staff improvement	2.39	2.90	+	-1.90	(.07)

Table 7.7b

Evaluation Survey Data: Pre-Post Intervention T-tests: School G
(Pre-test N = 19, Post-test N = 19)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Environment					
Environmental influence on policy and programs					
Students	2.59	3.59	+	-2.20	(.04)
Teachers	3.22	3.84	+	-2.52	(.02)
Principals	3.94	4.26	+		
Central office	4.17	4.50	+		
Board of education	4.47	4.38	-		
Parents	3.00	3.22	+		
The AFT and affiliates	3.13	3.12	-		
State government	2.88	4.53	+	-5.19	(.00)
Federal government	2.69	4.24	+	-4.21	(.00)
Community agencies (police, fire, etc.)	2.23	2.67	+	-1.79	(.09)
Organization Structure					
Standardization	3.98	4.69	+	-2.78	(.01)
Autonomy	3.85	4.04	+		
Variety	4.24	4.61	+		
Hierarchy of authority	3.54	2.85	+	3.06	(.00)
Organizational Process					
Problem-solving process					
Evaluation	3.46	4.12	+	-2.00	(.05)
Solution generation	3.76	4.39	+	-2.55	(.02)
Internal diffusion	2.57	3.00	+	-1.41	(.17)
Legitimation	2.39	2.44	+		
Adoption	2.63	3.37	+	-2.55	(.02)
Implementation	3.54	4.28	+	-3.04	(.01)
Routinization	3.34	4.29	+	-3.79	(.01)
Participation in decision making					
Actual participation in policy decisions	1.55	1.59	+		
Should participate in policy decisions	3.09	3.07	-		
Actual participation in operational decisions	2.96	3.64	+	-4.21	(.00)
Should participate in operational decisions	4.20	4.29	+		

Table 7.7b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Resource Allocation Process					
Amount of attention and resources					
1. Develop highly qualified staff	3.44	4.24	+	-2.77	(.01)
2. Implement comprehensive and integrated instructional program	3.61	4.28	+	-2.93	(.01)
3. To provide positive and supportive school environment	3.61	4.17	+	-2.37	(.02)
4. To provide on-going evaluation of school programs for modification and development	2.83	3.61	+	-2.45	(.02)
5. To experiment with educational innovations	2.89	3.00	+		
6. To be responsive to community	3.33	4.00	+	-2.92	(.01)
7. To communicate to public objectives and results of school programs	3.00	3.17	+		
8. To promote educational achievement of minority students	4.11	4.61	+	-2.81	(.04)
9. To coordinate school activities with relevant community groups	2.71	2.94	+		
10. To lessen disciplinary problems	3.44	3.50	+		
Organizational Effectiveness					
Goal effectiveness					
1. Develop highly qualified staff	3.61	4.00	+		
2. Implement comprehensive and integrated instructional program	3.33	3.89	+	-2.08	(.05)
3. To provide positive and supportive school environment	3.28	3.89	+	-2.73	(.01)
4. To provide on-going evaluation of school programs for modification and development	2.78	3.33	+	-1.87	(.07)
5. To experiment with educational innovations	2.65	3.06	+	-2.06	(.05)
6. To be responsive to community	3.00	3.83	+	-3.07	(.00)
7. To communicate to public objectives and results of school programs	2.94	3.39	+		
8. To promote educational achievement of minority students	3.11	3.72	+		
9. To coordinate school activities with relevant community groups	2.50	3.00	+		
10. To lessen disciplinary problems	2.94	3.28	+		

Table 7.7b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Integration					
Role behavior					
Role overload	3.28	2.94	+		
Role ambiguity	2.57	1.92	-	3.55	(.00)
Job satisfaction					
Intrinsic satisfaction	4.31	5.04	+	-2.85	(.01)
Contextual satisfaction	3.90	4.88	+	-4.21	(.00)
Cohesiveness	5.19	5.39	+		

School H

Context

School H was the smallest school in our sample, with 14 full-time teachers and 290 students. More than one-third of the students were minority, and students represented a socio-economic cross section. The school had been integrated by court order several years earlier, and interview data suggested that many of the staff members who had been in the school for a long time were still having difficulty adjusting to changes in the student composition. The standardized test scores ranked tenth of the 17 elementary schools in the 1974-75 school year.

Pre-test survey data were extremely low in this school: every scale was well below the district average. It was the lowest in our sample in Colleague Relations, Supervisory Relations, and existence of problem-solving processes, as well as in many other areas. The faculty did not get along well with one another. There was a strongly militant union representation in the building as well as a small contingent of NEA members. There were some hard feelings between the "old guard" teachers and newer teachers, especially in terms of the necessity of making changes to accommodate the changing student body. The principal was viewed by some teachers as being resistant to changes and not willing to take actions that would draw attention to the school. There was a fairly strong anti-administration feeling in the building, and there did not appear to be cooperation between staff and principal or even among staff members to solve educational problems. Many teachers seemed to feel that their real problems belonged in union-management negotiations.

Effort

There were five meetings of the Program Group in School H during the first year of the program, with approximately 90 percent of the teachers participating. The leader and monitor spent a total of about 15 hours on the OD program, in addition to the time spent in meetings. Several additional teachers visited other schools as part of efforts to solve the problem the group dealt with. The leader utilized the training materials, but the monitor did not.

After going as far as possible on one problem, the group simply did not meet any more. Although considerable activity had accompanied the first problem-solving effort, there was not much interest in continuing the OD program.

Process

The program was implemented to a very low degree in School H. There was little teamwork between the leader and the monitor. The communication and group process forms were not used concurrently with the meetings (some were filled out later by the monitor) and both the leader and the monitor appeared uncertain concerning their division of labor. The seven-stage decision-making process was begun but not completed for the one problem area that the Program Group considered.

The leader and the monitor did not perceive the principal as cooperating with the program. School H even had difficulty convening a Review Committee meeting until the interventionists spelled out possible procedures to utilize to call such a meeting. The leader and the monitor felt that the principal did not want to confront the problem identified and the solution generated by the faculty and was therefore unwilling to meet in a Review Committee meeting.

Another aspect of the situation in School H was that neither the leader nor the monitor particularly enjoyed their roles. The leader admitted that she had not really wanted the job and that she really did not like to be in leadership positions. She did not try to get the group interested in another problem area because she wanted to get everyone "off her back." The particular problem area that had been selected--the individualization of reading instruction--had aroused philosophical and educational disagreements among the teachers, and the process of working in small grade-level subgroups had resulted in the surfacing of much interpersonal tension. Many of the teachers did not agree with the proposed solution. The leader felt she had suddenly been made to bear the burden of everyone's problems.

At the beginning of the second year of the program, the faculty in School H formally voted not to continue meeting as a Program Group.

Output

Problems. The Program Group in School H identified the individualization of reading instruction as its goal, in response to the problem that the present educational program was not meeting the needs of the low achievers in the school. The chosen solution was to initiate cross-graded reading instruction, to allow students to be assigned to appropriate reading groups, not necessarily with their own classroom teachers or even in their own grade level. The Program Group met twice with the district reading coordinator in planning the implementation of such a program. They decided not to implement it until the following school year. Such implementation did occur, although not on the scale originally envisioned.

Data. The data for School H appear in Tables 7.8a and 7.8b. There was a general improvement in the second round of the School Survey data, much of which might be described as "regression towards the mean." Significant improvement in Voice in Educational Program and Evaluation of Students could be attributed to the Program Group effort. However, evidence that the OD program as implemented in School H could be responsible for any major improvement in attitudes or the organizational climate is very weak.

There was an upward movement in all of the seven stages of the problem-solving process, with Internal Diffusion and Legitimation being statistically significant. It is possible that the OD program sensitized the principal and staff in this school to the very low morale and low level of professional activity in the school and that individuals began to take measures to improve the situation. Interview data reported that the teachers were surprised at how low their data was in comparison to other schools. They may have become motivated to do things more positively and to cooperate with one another more. However, this is merely conjecture. Whether any of the concepts of the program remained after the offical program terminated can simply not be determined with any certainty. We are pessimistic on this score.

Table 7.8a

School Survey Data: Pre-Post Intervention T-tests: School H
(Pre-test N = 13, Post-test N = 14)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Client Relations					
School community relations	2.75	3.21	+	-1.90	(.07)
Community influence	2.94	3.49	+	-1.77	(.09)
Community interest	2.88	2.96	+		
Students	2.73	3.18	+		
Internal School Relations					
Colleague relations	2.12	2.41	+		
Professional support	2.58	2.56	-		
Staff integration	1.79	2.19	+		
Supervisory relations	2.16	2.69	+		
Administrative practices	1.81	2.67	+	-2.89	(.01)
Professional Climate					
Performance and development	2.61	2.83	+		
Faculty voice in educational program	2.09	2.60	+	-1.70	(.10)
Participation in program setting	1.92	2.71	+	-2.59	(.02)
Responsiveness to faculty	2.18	2.54	+		
Facilities					
Materials and equipment	2.58	3.28	+	-2.04	(.05)
Building and facilities	2.53	2.58	+		
Work Load					
Professional work load	2.25	2.42	+		
Non-professional work load	3.13	2.91	-		
School Performance					
Educational effectiveness	2.41	2.81	+		
Evaluation of students	2.31	2.85	+	-1.80	(.09)
Cognitive evaluation	2.33	2.83	+		
Student placement	2.28	2.74	+		
Special services	2.92	3.11	+		
Services for special children	2.95	3.17	+		
Services for student and staff improvement	2.73	3.05	+		

Table 7.8b

Evaluation Survey Data: Pre-Post Intervention T-tests: School H
(Pre-test N = 13, Post-test N = 14)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Environment					
Environmental influence on policy and programs					
Students	2.27	2.83	+		
Teachers	2.75	3.46	+	-2.04	(.05)
Principals	3.67	3.62	-		
Central office	4.58	4.23	-		
Board of education	4.42	4.31	-		
Parents	3.83	3.75	-		
The AFT and affiliates	4.17	4.00	-		
State government	3.25	4.00	+		
Federal government	3.33	3.83	+		
Community agencies (police, fire, etc.)	2.34	2.58	+		
Organization Structure					
Standardization	4.31	4.10	-		
Autonomy	4.44	4.19	-		
Variety	3.55	3.90	+		
Hierarchy of authority	4.14	4.15	+		
Organizational Process					
Problem-solving process					
Evaluation	2.69	3.21	-		
Solution generation	2.54	3.02	+		
Internal diffusion	1.89	2.57	+	-2.19	(.04)
Legitimation	1.50	1.98	+	-1.88	(.07)
Adoption	2.33	2.50	+		
Implementation	2.49	2.79	+		
Routinization	2.89	3.25	+		
Participation in decision making					
Actual participation in policy decisions	1.55	1.63	+		
Should participate in policy decisions	3.33	3.18	-		
Actual participation in operational decisions	3.25	3.12	-		
Should participate in operational decisions	4.37	4.22	-		

Table 7.8b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Resource Allocation Process					
Amount of attention and resources					
1. Develop highly qualified staff	2.58	3.00	+		
2. Implement comprehensive and integrated instructional program	2.67	3.15	+		
3. To provide positive and supportive school environment	2.91	3.23	+		
4. To provide on-going evaluation of school programs for modification and development	2.64	2.92	+		
5. To experiment with educational innovations	2.82	2.77	-		
6. To be responsive to community	2.82	2.92	+		
7. To communicate to public objectives and results of school programs	2.46	2.77	+		
8. To promote educational achievement of minority students	2.80	3.15	+		
9. To coordinate school activities with relevant community groups	2.64	2.54	-		
10. To lessen disciplinary problems	3.17	3.00	-		
Organizational Effectiveness					
Goal effectiveness					
1. Develop highly qualified staff	2.27	3.00	+	-1.87	(.08)
2. Implement comprehensive and integrated instructional program	2.50	2.92	+		
3. To provide positive and supportive school environment	2.73	3.00	+		
4. To provide on-going evaluation of school programs for modification and development	2.55	2.92	+		
5. To experiment with educational innovations	2.82	2.42	-		
6. To be responsive to community	2.55	3.25	+	-2.00	(.06)
7. To communicate to public objectives and results of school programs	2.36	2.67	+		
8. To promote educational achievement of minority students	2.55	3.08	+		
9. To coordinate school activities with relevant community groups	2.64	2.58	-		
10. To lessen disciplinary problems	2.50	2.75	+		

Table 7.8b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Integration					
Role behavior					
Role overload	3.23	3.56	+		
Role ambiguity	2.71	2.67	+		
Job satisfaction					
Intrinsic satisfaction	4.08	4.52	+		
Contextual satisfaction	3.69	4.02	+		
Cohesiveness	3.74	4.19	+		

The High School

The OD program was implemented in one secondary school in addition to the eight elementary schools discussed above. The interventionists had originally planned to restrict their activities to elementary schools, but it became clear that the Superintendent did not want to exclude secondary schools. Making it quite clear that the program was not designed for schools of the large size and relatively high complexity of a high school, we nevertheless agreed to work with members of interested secondary schools to adapt the program to their needs.

Secondary school data are not included in the analyses of the preceding and following chapters. Because of the essential differences in organization of such schools, and because our research intent is to test the usefulness of our OD design in improving elementary school functioning, we have chosen to limit our formal data analysis to elementary schools. It should be noted, however, that the basic patterns in the data remain the same regardless of whether the secondary schools are included.

We are including a "case study" of the high school because it offers several opportunities to shed light on the processes of the OD program. First, it allows us to compare five different Program Groups within the same school context and under the same principal. Second, for the very reason that a high school is a more complex organization, it brings out some of the problems that can emerge in the implementation of the program. Finally, it serves as a one-case test-run of the program in secondary school settings.

Context

The high school was a typical urban high school, with over 100 full-time teachers and 2,300 students of mixed racial type and socio-economic status.

There was a large vocational program as well as the general education and college prep courses. The school had the typical problems associated with secondary schools, such as truancy and class cutting.

The teachers were divided into departments, and there was little interdepartmental cooperation or communication. The faculty was very strongly oriented toward the teachers' union, although there was a small NEA contingent. In general, the pre-test data, including Colleague Relations, were very close to the district average for secondary schools.

The principal in the high school was well-liked and seemed philosophically in favor of the program. Practically, he hoped it would serve as a mechanism to tap the professional capabilities of his staff. He had an "open door policy," encouraging input, suggestions and complaints from all groups--parents, teachers, and students. This reflected his concern that people feel that their viewpoints are taken seriously. However, the very size of his organization was a problem in soliciting meaningful participation in decision making. The school was right at or slightly below the district average in terms of the seven-stage problem-solving process.

The size of the high school necessitated creating Program Groups composed of subgroups of the faculty. It was decided in consultation with a representative group from the school that each Program Group should consist of the teachers who had a common class-planning time, because this would provide them with time during the school day to meet. The alternative, which would have resulted in groups more closely approximating work groups but posed a major problem because of the lack of opportunity to meet, was to divide up into departments. The teachers with whom we consulted, however, felt it would be good to get some teacher problem solving that cut across departmental lines.

A problem with this was the groups which served as feedback groups were artificially created--i.e., they were not natural workgroups, and they did not necessarily share a mutual perspective concerning the organization.

Effort

Effort varied in the five high school groups. One group stopped meeting after the initial three released-time meetings, but the other four continued meeting weekly throughout the Spring for a total of twelve meetings apiece. Attendence dropped to a steady group of 50 percent of the original size in one Program Group and about 25 percent of the original group in the other three. Although many teachers opted out of the program, those who remained were dedicated, and some of them volunteered to carry out activities outside group meetings.

The leaders of the four groups which continued to meet devoted a great deal of time to the program and utilized the program materials to a great extent. The leader in the most active group was especially careful to adhere to guidelines in the materials and look to the materials for suggestions when she encountered difficulties.

In contrast to the conscientious job done by the leaders, most of the monitors became tired of doing their job very early in the program and devoted very little time to meetings or monitor functions. This put a huge burden on the leaders. It was not unexpected, however, as the five leaders in the high school at the very start of the program decided to exclude monitors from meetings which they held together to coordinate the OD effort in the school as a whole. Monitors quickly sensed their position to be a sort of "second best" and withdrew their involvement.

At the end of the first year, the leader of the most active group had "burned herself out;" another leader was transferred to another high school; and a third took a coaching position which resulted in the loss of his planning period--leaving only one leader who was interested in continuing. Because so few faculty members were involved in the program and volunteers were not forthcoming to fill the vacated leader and monitor roles, the high school program failed to restart in the Fall.

Process

As was alluded to above, there was very little teamwork between the leaders and the monitors in any of the high school groups. In the group which stopped meeting after three meetings, leader-monitor conflict was one reason given for termination. In the other four groups, the monitors were at best reluctantly carrying out their role, and in no case were the communication and group problem-solving forms filled out regularly by the monitor.

After an initial attempt to work together, there was little cooperation between the five group leaders in the high school. This would have been desirable given the substantial burden on the groups to diffuse solutions and integrate their efforts with the rest of the organization. Any particular group was composed of a relatively small group of faculty. Most of the groups experienced attrition and were left with a core of teachers who represented the most populous departments and shared more common viewpoints. This limited the extent to which the Program Groups represented the general feelings of the faculty. Without some coordination of information, each group had to devise its own procedures to diffuse solutions, thus resulting in a fragmentation of effort. Toward the end of the year, the leaders were beginning to suggest ways to correct this.

Although they all attempted to follow a systematic change process, the five high school leaders differed substantially in the extent to which they were able to "train" an effective problem-solving group. One leader followed the guidelines completely and made sure the group knew exactly the "model" it was following. Her group began with a simple problem and continued to successively more complex problems experiencing success and consequent reinforcement with every solution. Other leaders were less successful in teaching the model to their group. Although this clearly depended partially on the skill of the leader, it is evident from interview data that the "personalities" of the groups differed substantially. Several of the groups were initially comprised of many impatient, cantankerous individuals who were not willing to go through a long and systematic problem-solving process. Ironically, since many of these same groups focused immediately on "very important" problems which were also extremely complex and laced with philosophical issues of education, they ended up immersing themselves in literally endless problem-solving processes which offered little prospect for achievement. Two groups spent the entire twelve meetings generating solutions for the problems of class cutting and truancy.

In the high school, although the principal was sympathetic to the program and cooperated with the groups, he was aware that only a portion of the faculty were participating and he did not make any outward gestures to demonstrate that he would grant official status to group decisions or requests. This made it very difficult for the leaders, who had to compete equally for the attention of the principal with the many other groups and individuals seeking his time. Although each of the four groups had at least one Review Committee meeting, the leaders did not seem satisfied that they represented a true legitimation of solutions.

The leader in each group fed back the pre-test data. Among the five groups in the high school there was a great difference in the way the data was received by the teachers. In three groups there was much interest and the teachers generally attributed validity and relevance to it. In two groups, however, the group became immediately side-tracked by complaints about the format of the questions and the ambiguity of the feedback scores. Members dismissed much of the data as irrelevant, as dealing with matters peripheral to the real problems of the school. There were also incidences of group members arguing against the worth of the questionnaire because they happened to disagree with the "values" inherent in the labels to certain responses as "favorable" or "unfavorable" (i.e., they took issue with the model of effective organization functioning upon which the questionnaire was based). These two groups were the same ones which ignored the program guidelines to start with a fairly straightforward and readily solved problem.

Output

Problems. Three of the solutions implemented were in the general problem area of insufficient interdepartmental relations. Interdepartmental liaisons were elected, a bulletin was begun, and an interdepartmental calendar was posted. It is not clear, however, that any of these measures were used extensively by the teachers. Student behavior was an area which concerned three of the five groups. They generated solutions dealing with the attendance patterns of students, including truancy, class cutting, and study hall cutting. A few changes in this problem area were implemented as a result of the program.

The most active group in terms of solutions actually implemented dealt with three general areas. First, they made some changes on each floor to teachers' workroom. Second, they took preliminary steps toward increasing the attention given in subject area classes to the reading level of the students. This included requesting a workshop directed specifically to subject area reading programs. Third, they introduced ninth grade testing in basic skills to help determine placement of students and to provide teachers with knowledge of remedial work needed.

Although this group was very active, it was largely a one-woman effort, with other group members doing little of the activity necessary outside of the group. By the end of the year, the leader felt bitter about the apparent lack of concern of other teachers with her efforts, and she began to place blame on both the principal and the interventionists for not giving her the necessary support and for not generating proper enthusiasm among the teachers. She quit the program, claiming that the interventionists had not carried out their proper role in the program. In fact, what she was upset about was the lack of institutional support for the role of the leader. Especially in the large high school, the time required to do a good job was very large, and this made the lack of released time and secretarial support very noticeable. In addition, dealing with such a large and less close-knit faculty made salient the need for an official status to be attributed to the role of the leader.

A final comment is in order concerning the nature of the problems that the high school groups dealt with. To a great extent, the constituency of the group dictates the content of problems identified and solved. High school groups, being heterogeneous, inevitably dealt with either universal school-level problems, such as truancy, or focused on integrative problems of school organization, such as interdepartmental relations and communication. Problems of the first type are universal perhaps because they are intractable, given pragmatic, organizational and societal constraints. Problems of the second type may or may not be pertinent to the organization. If they are not, then such groupings are useless. If they are, then the scope of the problem may be beyond the capabilities of the group. Any further implementation of this program in a high school should certainly give close attention to the optimal division of the faculty into subgroups in terms of the nature of the problems upon which attention will be focused. Groups need the resources, expertise, and authority to deal with problems. In our intervention, it is fairly clear that the groups were not equipped to deal with problems of such a broad scope. The result in many cases was frustration.

Data. Data for the high school appear in Tables 7.9a and 7.9b. There is a general increase in favorability in the School Survey data, with every category and subscale improving, many to a significant extent. Evaluation data, however, did not change very much. Even the problem-solving process variables were relatively unaffected. Evaluation of Problems increased significantly, but many of the other stages declined. The OD program appears not to have had an impact on the overall high school functioning, possibly because it ended up involving so few teachers and its results in terms of solutions were so ineffectively diffused among the large staff.

Interview data support this general pessimism. Although the leaders remained supportive of the concept, they were frustrated by the magnitude of the task and the lack of institutional and administrative commitment to the program.

The principal was highly favorable towards the program. He felt it was the first effort he had seen that actually got teachers involved in solving educational problems. His failure to lend strong administrative support seems to have been a manifestation of his general non-directive leadership style and of his sensitivity to dealing with a large and varied group of teachers. He simply felt, it appears, that administrative pressure is not an effective way to achieve results with teachers.

Whether the program would have turned out differently had there been a strong administrative endorsement is open to debate. However, it is clear that the groups and leaders did not feel particularly reinforced in their efforts and that in the rush of activities for the new school year (including a teachers' strike) there was not a large enough group of teachers attaching high priority to the OD effort to get it going again.

Summary

The case studies just presented point out the great variety of behaviors which occurred during the implementation of the OD program. It is not possible to summarize these case studies in any brief way. Chapter Eight is, essentially, one attempt to use a common conceptual framework which allows the individual cases to be combined and summarized.

Table 7.9a

School Survey Data: Pre-Post Intervention T-tests: High School
(Pre-test N = 113, Post-test N = 69)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Client Relations					
School community relations	2.76	3.06	+	-3.49	(.00)
Community influence	3.30	3.57	+	-2.20	(.03)
Community interest	2.30	2.64	+	-2.66	(.01)
Students	2.50	2.68	+	-1.93	(.06)
Internal School Relations					
Colleague relations	2.80	2.98	+		
Professional support	2.79	3.03	+	-1.86	(.06)
Staff integration	2.76	2.92	+		
Supervisory relations	3.37	3.54	+		
Administrative practices	2.51	2.83	+	-2.26	(.03)
Professional Climate					
Performance and development	2.75	2.96	+	-1.69	(.09)
Faculty voice in educational program	2.39	2.77	+	-3.23	(.00)
Participation in program setting	2.18	2.88	+	-5.06	(.00)
Responsiveness to faculty	2.60	2.69	+		
Facilities					
Materials and equipment	2.64	2.85	+		
Building and facilities	2.44	2.51	+		
Work Load					
Professional work load	2.47	2.75	+	-2.16	(.03)
Non-professional work load	2.31	2.61	+	-2.24	(.03)
School Performance					
Educational effectiveness	2.84	3.06	+	-2.27	(.03)
Evaluation of students	2.73	2.99	+	-2.77	(.01)
Cognitive evaluation	2.62	2.87	+	-2.27	(.03)
Student placement	2.79	3.09	+	-2.41	(.02)
Special services	2.53	2.69	+		
Services for special children	2.64	2.73	+		
Services for student and staff improvement	2.47	2.64	+		

Table 7.9b

Evaluation Survey Data: Pre-Post Intervention T-tests: High School
(Pre-test N = 113, Post-test N = 69)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Environment					
Environmental influence on policy programs					
Students	2.94	3.02	+		
Teachers	3.14	3.15	+		
Principals	4.23	4.21	-		
Central office	4.40	4.39	-		
Board of education	4.69	4.49	-		
Parents	3.29	3.31	+		
The AFT and affiliates	3.32	3.28	-		
State government	3.24	3.79	+	-3.32	(.00)
Federal government	3.09	3.55	+	-2.49	(.01)
Community agencies (police, fire, etc.)	2.20	2.70	+	-3.63	(.00)
Organization Structure					
Standardization	3.85	4.07	+		
Autonomy	3.88	3.96	+		
Variety	3.84	3.85	+		
Hierarchy of authority	3.85	3.78	-		
Organizational Process					
Problem-solving process					
Evaluation	3.08	3.35	+		
Solution generation	3.16	3.05	-		
Internal diffusion	2.50	2.39	-		
Legitimation	2.29	2.07	-		
Adoption	2.73	2.95	+		
Implementation	3.00	3.11	+		
Routinization	3.16	3.18	+		
Participation in decision making					
Actual participation in policy decisions	1.79	1.75	-		
Should participate in policy decisions	3.33	3.28	-		
Actual participation in operational decisions	3.33	3.47	+		
Should participate in operational decisions	4.20	4.08	-		

Table 7.9b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Resource Allocation Process					
Amount of attention and resources					
1. Develop highly qualified staff	3.22	3.13	-		
2. Implement comprehensive and integrated instructional program	3.24	3.30	+		
3. To provide positive and supportive school environment	3.27	3.29	+		
4. To provide on-going evaluation of school programs for modification and development	2.75	2.87	+		
5. To experiment with educational innovations	2.82	2.70	-		
6. To be responsive to community	3.25	3.26	+		
7. To communicate to public objectives and results of school programs	2.90	3.04	+		
8. To promote educational achievement of minority students	3.31	3.70	+		
9. To coordinate school activities with relevant community groups	2.52	2.87	+		
10. To lessen disciplinary problems	3.64	3.87	+		
Organizational Effectiveness					
Goal effectiveness					
1. Develop highly qualified staff	3.05	3.12	+		
2. Implement comprehensive and integrated instructional program	2.94	3.06	+		
3. To provide positive and supportive school environment	2.72	2.86	+		
4. To provide on-going evaluation of school programs for modification and development	2.55	2.69	+		
5. To experiment with educational innovations	2.52	2.61	+		
6. To be responsive to community	2.86	2.91	+		
7. To communicate to public objectives and results of school programs	2.56	2.74	+		
8. To promote educational achievement of minority students	2.74	2.90	+		
9. To coordinate school activities with relevant community groups	2.38	2.71	+	-2.70	(.01)
10. To lessen disciplinary problems	2.51	2.49	-		

Table 7.9b (continued)

	$\bar{X}$ pre	$\bar{X}$ post	Change	t	Significance Level
Integration					
Role behavior					
Role overload	3.29	3.11	-		
Role ambiguity	2.68	2.57	-		
Job satisfaction					
Intrinsic satisfaction	3.97	4.05	+		
Contextual satisfaction	4.03	4.26	+		
Cohesiveness	4.35	4.47	+		

CHAPTER EIGHT

FORMATIVE PROCESS ANALYSIS

Introduction

This chapter will focus on program implementation and will present a formative or process analysis of the OD program. In the last chapter, the nine case studies were presented independently of one another. This chapter will move up one level in its focus and will systematically seek patterns and themes which recur in the eight elementary schools, in an effort to generalize in a defensible manner to those qualities or characteristics of implementation that can be tentatively identified with relative "failure" or "success" of the program. Because of its different organizational context, the high school implementation experience will not be discussed in this chapter.

Process data is most helpful if it can be linked to outcome measures. When considering only one school, it is of course dangerous to generalize from the occurrence of particular outcomes with particular process variables. This is especially true given the necessarily gross measures of both outcome and process variables in an organizational change effort such as this OD program. Across several schools, however, patterns emerge in the association of outcome variables with process variables which will allow us to at least identify the most important explanatory variables.

The first task of this chapter will be to specify the outcome measures which will be utilized in the process analysis. Then we will utilize the systems model presented in Figure 8.1 to develop the formative evaluation. The product will be some empirically based generalizations concerning the relative importance of implementation or process variables to program outcomes.

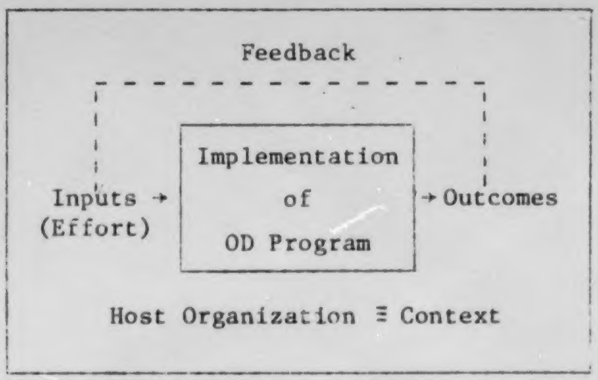
Feedback
Inputs →
(Effort)
Implementation
of
OD Program
→ Outcomes
Host Organization ≡ Context

Figure 8.1. The formative process of program implementation as a cybernetic system.

Outcome Measures

Two kinds of outcome measures will be specified in this chapter. First, the total number of solutions implemented by the school is the most direct outcome of the Program Group in the school. The obvious problem encountered is that solutions differ along a number of dimensions, including permanence, significance, difficulty of implementation, and general topic area. To make a simple count is to risk losing information--i.e., to create a measure so gross that it does not result in meaningful comparisons. On the other hand, all weigntings which we have tried failed to do justice to the differences among solutions. Solutions which are difficult to implement may not be permanent in intent or effect. Topic areas that appear to us to have low educational import may be perceived by teachers to be major problem areas in school functioning. A simple, easily implemented change may be the product of long sessions of information exchange and problem solving.

Thus, we have elected to go with the simple count in hopes that differences in quality may cancel each other out. (The first row of Table 8.3 indicates the number of solutions generated by each school.) In the cases where multiple solutions were generated to deal with the same problem area, we have counted each separate solution that was implemented.

The second outcome measure which we will utilize is the change in teachers' perceptions, as measured by the questionnaires. Here we deal with two different indicators of program effect, each of which has strengths and weaknesses. The first score calculated for each school is the number of categories in which there was a significant t-value[1] indicating an increase in perceived favorability from before the OD intervention to after the intervention. Although School Survey data were fed back, thus limiting their use for summative evaluation, they are a meaningful outcome measure for formative evaluation. In fact, an interesting empirical question is to ask how sensitive the survey data are to group problem-solving efforts. The survey data are also valuable as an outcome measure because they measure specific aspects of the school environment in school-specific items. They are thus more indicative of teachers' perceptions of the everyday task-related factors which impinge on them than the more general scales of the evaluation survey. Finally, the School Survey is worded in value-laden terms, so that results can be compared as to favorability. This makes it possible to say that perceptions in a school "improved" or "got worse," rather than simply saying that they changed.

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[1] The significance level reported is for a two-tailed t-test. Since directionality is hypothesized for participating schools, however, we divide the p value in half to equal that for a one-tailed t-test. Thus, we have included all scales with a directional increase significant at .05 or less.

The second score calculated for each school is the number of evaluation questionnaire areas which changed significantly from before to after the intervention as measured by a Student t-test. Some areas on the evaluation questionnaire do not imply a value judgement (e.g., structural items); thus, change in the hypothesized direction will be counted, and the score will be an index of program effect, rather than organizational improvement per se. These data have the advantage of not having been fed back, and thus are a less contaminated indication of organizational change. However, they consist partially of rather general indicators and some of them are thus conceptually removed from the day-to-day task functioning of the teacher and may be less sensitive to changes as a result of the OD program.

A summary table indicating direction and level of significance of change for each category of the School Survey appears as Table 8.1. For the purpose of arriving at an outcome measure, we have omitted subscales in order not to

Table 8.1

School Survey Data: Summary Data for Each Participating Elementary School (Direction and Level of Significance)

	School							
	A	B	C	D	E	F	G	H
Client Relations								
School community relations	+	+	-	+	+	-	+(*)	+(*)
Students	-	+	+	+	+	+	+(*)	+
Internal School Relations								
Colleague relations	+	+	+	+	+	-	+(**)	+
Supervisory relations	-	+(*)	+	+(***)	+	+	+(***)	+
Administrative practices	+	+	+	+	+	-	+(***)	+(**)
Professional Climate								
Performance and development	-	+	+	+(*)	+	+	+(***)	+
Faculty voice in educational program	+	+(***)	+	+(***)	+	+(*)	+(***)	+(*)
Facilities								
Materials and equipment	+	+(*)	-	+	-	-	+	+(**)
Building and facilities	+	+(***)	+	+	+	+	+	+
Work Load								
Professional work load	-	-	+	+	+	-	+(***)	+
Non-professional work load	-	+	-	+(***)	+	-(***)	+(***)	-
School Performance								
Educational effectiveness	+	+(***)	-	+(*)	+(*)	+	+(**)	+
Evaluation of students	+	-	-	+(**)	-	-	+(**)	+(*)
Special services	+	+	-	+	+	+	+	+

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[*] Two-tailed t-test significant at .10 or less.

[**] Two-tailed t-test significant at .05 or less.

[***] Two-tailed t-test significant at .01 or less.

be in a position of counting significant improvement in both the overall category and one or more subscales. We elected to count the category itself instead of the subscales because the category scores were fed back and we wanted a measure that reflected the implementation of the OD program. A summary table of the evaluation questionnaire data appears as Table 8.2.

In Table 8.3, the second and third rows give the School Survey change index and the evaluation questionnaire change index for each school. The School Survey change index was calculated by counting the number of categories in which there was a statistically significant improvement. The evaluation questionnaire change index was calculated by counting the number of areas in which there was significant change in the hypothesized direction.

To arrive at an overall index of program effect, the schools were ranked on each of the three indicators: (1) the number of solutions implemented; (2) the number of categories which increased significantly; and (3) the number of significant changes in the hypothesized direction in the evaluation questionnaire data. The ranks of the three indicators were then totaled, and the totals were ranked. The fourth row of Table 8.3 gives the final ranking of schools according to program effect as measured by the outcome variables. School B, which is ranked first, had the greatest program effect. Schools C and F, which tied for seventh, had the lowest program effect, as measured by our admittedly gross indicators.

There are two rather surprising results. School H, where the OD program terminated rather quickly because of conflict over a chosen solution, experienced considerable data improvement, and ends up higher in program effect than several schools where the program continued. We believe that to a large degree this is because the school began so extremely low in the data, and a natural

Table 8.2

Evaluation Survey Data: Summary Data for Each Participating Elementary School
(Direction and Level of Significance)

	School							
	A	B	C	D	E	F	G	H
Environment (hypothesized direction)								
Students (+)	+	+(**)	+(*)	+	+	+	+(**)	+
Teachers (+)	No change	+(**)	+(*)	+	+	-	+(**)	+(**)
Principals (+)	-	-	-	+	+	-	+	-
Central office (no change)	+	-(*)	+	+	No change	+	+	-
Board of education (no change)	-	-(**)	+	-	+	-(**)	-	-
Parents (+)	+	-	+	+(*)	-	-	+	-
The AFT and affiliates (no change)	-	-	+	+	-	-(*)	-	-
State government (no change)	+(*)	+	+(*)	+(***)	-	+	+(***)	+
Federal government (no change)	+(***)	-	+(***)	+(**)	+	+	+(***)	+
Community agencies (no change)	+(***)	-(*)	+	+(**)	+	-	+(*)	+
Organization Structure								
Standardization (+)	+	+	+	-	+	+	+(***)	-
Autonomy (no change)	No change	+	+	+	-	+	+	-
Variety (+)	+	+	+	-	-	+	+	+
Hierarchy of authority (-)	+	-(*)	+	-	+(***)	+	-(***)	+
Organizational Process								
Problem-solving process								
Evaluation (+)	+	+(***)	+(*)	+(***)	+	+(*)	+(**)	+
Solution generation (+)	+(**)	+(***)	+	+(***)	+	+	+(**)	+
Internal diffusion (+)	+(*)	+(**)	-	+(**)	-	+	+	+(**)
Legitimation (+)	+(**)	+(***)	-	+	+	+	+	+(*)
Adoption (+)	+(*)	+(**)	-	+	+	+	+(**)	+
Implementation (+)	+	+(***)	+	+(***)	+	+	+(***)	+
Routinization (+)	+	+(***)	-	+(**)	+	-	+(***)	+

Table 8.2 (continued)

	Schools							
	A	B	C	D	E	F	G	H
Participation in decision making								
Actual participation in policy decisions (+)	+	+	-	+	+	+	+	+
Should participate in policy decisions (no change)	-	-	+	+	-	+	-	-
Actual participation in operational decisions (+)	+	-	-	+	+	+	+(***)	-
Should participate in operational decisions (no change)	No change	+	+	+	-	-	+	-
Resource Allocation Process								
Amount of attention and resources								
1. Develop highly qualified staff (+)	+	+(***)	-	+	+	-	+(***)	+
2. Implement comprehensive and integrated instructional program (+)	+	+(***)	+	+(*)	+(**)	+	+(***)	+
3. To provide positive and supportive school environment (+)	+	+(***)	+	No change	+	+	+(**)	+
4. To provide ongoing evaluation of school programs for modification and development (+)	+	+(**)	+	+(*)	+(**)	+	+(**)	+
5. To experiment with educational innovations (+)	-	+	+	+	-	-	+	-
6. To be responsive to community (+)	+(**)	+	+(**)	+(*)	+	+	+(***)	+
7. To communicate to public objectives and results of school programs (+)	+	+	+	+(**)	+	+(*)	+	+
8. To promote educational achievement of minority students (+)	+	+	+	+(**)	+	+	+(**)	+
9. To coordinate school activities with relevant community groups (+)	+	+	-	+(**)	+	-	+	-
10. To lessen disciplinary problems (+)	+	-	+	+	+	+	+	-

Table 8.2 (continued)

	Schools							
	A	B	C	D	E	F	G	H
Educational Effectiveness								
Goal effectiveness								
1. Develop highly qualified staff (+)	+	+(**)	-	+	-	-	+	+(*)
2. Implement comprehensive and integrated instructional program (+)	+	+	-	+(*)	+	-	+(**)	+
3. To provide positive and supportive school environment (+)	-	+	+	+	+	+	+(***)	+
4. To provide ongoing evaluation of school programs for modification and development (+)	+	+	+	+	+	+	+(*)	+
5. To experiment with educational innovations (+)	-(*)	+	+	+	-(*)	-	+(**)	-
6. To be responsive to community (+)	-	+	+	+	+	+	+(***)	+(*)
7. To communicate to public objectives and results of school programs (+)	-	+	+	+(**)	-	-	+	+
8. To promote educational achievement of minority students (+)	-	+	-	+(***)	-	-	+	+
9. To coordinate school activities with relevant community groups (+)	-	-	-	+	+	-	+	-
10. To lessen disciplinary problems (+)	-	+	-(**)	+	+	+	+	+
Integration								
Role behavior								
Role overload (no change)	-	+	-	+	+	+	-	+
Role ambiguity (-)	+	-	+	-	+	-	-(***)	-
Job satisfaction								
Intrinsic satisfaction (+)	+	+	+	+	-	+	+(***)	+
Contextual satisfaction (+)	+	+	+	+	-	+	+(***)	+
Cohesiveness (+)	-	+	+	+	-	+	+	+

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* Two-tailed t-test significant at .10 or less.
** Two-tailed t-test significant at .05 or less.
*** Two-tailed t-test significant at .01 or less.

Table 8.3

Outcome Measures

	School							
	A	B	C	D	E	F	G	H
Number of solutions implemented	5	9	6	5	7	5	3	1
(rank)	(4)	(1)	(3)	(4)	(2)	(4)	(7)	(8)
Number of significant increases in School Survey categories	0	5	0	6	1	1	11	5
(rank)	(7)	(3)	(7)	(2)	(5)	(5)	(1)	(3)
Number of significant changes in evaluation scales in hypothesized direction	5	15	4	15	2	2	24	5
(rank)	(4)	(2)	(6)	(2)	(7)	(7)	(1)	(4)
Sum of ranks on the three outcome indicators	15	6	16	8	14	16	9	15
Final rank	5	1	7	2	4	7	3	5

regression to the mean occurred. We believe there may also have been some therapeutic "shock value" in receiving such unfavorable feedback data, and that the individuals in the school may have taken strides to improve the climate in the school, quite apart from the mechanisms of the OD program.

The second result which is somewhat surprising is that School G, which also discontinued the OD program relatively early, ranked third in overall program effect. As mentioned in the case study in the last chapter, there is strong indication that the principal in this school put into effect many process changes in his administration of the school, largely as a result of being sensitized to various needs and techniques through the training and the feedback data. Although in a real sense this is also "program effect," these results will stand out in our formative evaluation as being somewhat anomalous since there is no way to tie them to the implementation of the OD program as it was designed by the interventionists. We are fortunate, however, in having extensive interview data indicating that beneficial changes were made in school functioning as a direct result of being exposed to and trying out the OD program.

Organizational Context

We have hypothesized that program effect will be greater if there is a high degree of "fit" between the organizational context and the OD program. At this point, we will explore what we mean by "context" and what we mean by "fit." We shall then dichotomize our schools into "low" and "high" fit groups, and determine whether such fit is linked to the degree of program effect.

As has been demonstrated in Chapter One, which explained the theory behind the design of the OD program, the survey-feedback, problem-solving program was based on a "model" of effective school functioning, as well as on an analysis of common organizational impediments to effective school functioning. The components of the OD program imply a change in the behaviors of school personnel. If this is not true, then the program is most likely not needed by the school. To the extent that this is true, successful implementation and adoption of the OD program will demand effort and commitment on the part of school personnel, to "unfreeze" existing modes of organizational behavior and to try out and "freeze" new behaviors (Lewin, 1958).

The implication is that the greater the discrepancy between pre-existing behaviors and the "model" of organizational functioning implied by the program, the more difficult it will be for the school to establish a productive Program Group. In other words, the greater the degree of fit between the context provided by the host organization and the OD program (i.e., the more congruent the context and the program), the more productive we expect the Program Group will be, if time and effort are held constant. A school which begins with a low program-context fit can possibly overcome that discrepancy over time, by gradually establishing conditions more consonant with the OD program, or through a large amount of effort. However, given a fixed time frame, we expect to find a greater degree of program effect in schools which had a higher context-program fit initially. (In the next section, "effort" will be introduced as a moderating variable.)

We have chosen to focus on three aspects of the school context which will serve as indicators of school-program fit. The first is the philosophical or behavioral model held by the principal. Based on our own interactions with the principals, structured interview data with both the principal himself and with teachers in his school, and structured interviews with district office personnel, each interventionist independently labled each of the principals as

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being more accurately described as being "Theory X" or "Theory Y." Theory X refers to managerial assumptions that subordinates basically dislike work, and therefore they must be controlled and directed in order to deliver adequate effort toward the achievement of organizational objectives. Theory Y refers to managerial assumptions that subordinates have many untapped capabilities, and that given adequate opportunity and encouragement, they will exercise a great deal of self-direction, acceptance of responsibility, and creativity in performing organizational tasks to which they are committed (McGregor, 1960).

We did not enter the research site planning to categorize the principals according to this scheme. However, we were immediately struck by the consistency with which individual principals kept returning to either Theory X or Theory Y statements to explain or predict teachers' behavior. It became clear to us that this basic difference in management philosophy was closely linked to the different degrees of cooperation and acceptance of the OD program by the principals. Those who held Theory Y assumptions about their staff were far less threatened by the concept of faculty problem-solving than principals who adhered to Theory X beliefs. In the first row of Table 8.4, the principal of each school is categorized as either Theory X of Theory Y. The former is an indication of low context favorability; the latter of high context favorability.

The second indicator of school-program fit is the extent to which there are constructive working relationships among the teachers in the school. Data feedback interventions are based on the assumption that members of a work group have similar viewpoints and perspectives, and will be motivated to work together to solve commonly perceived problems as identified by data generated

Table 8.4

Indicators of Context-Program Fit

	School							
	A	B	C	D	E	F	G	H
Principal model (X or Y)	Y (1)	Y (1)	X (2)	X (2)	X (2)	X (2)	Y (1)	X (2)
Rank on Cohesiveness-Colleague Relations scales	2 (1)	6 (2)	5 (2)	3 (1)	7 (2)	4 (1)	1 (1)	8 (2)
Rank on initial problem-solving activity	2 (1)	1 (1)	6 (2)	5 (2)	7 (2)	4 (1)	2 (1)	8 (2)
Context-program fit	High	High	Low	Low	Low	High	High	Low
Sum of dichotomized scores	3	4	6	5	6	4	3	6

by the work group itself. Group problem solving is, however, a difficult and time-consuming process, and can be a very conflictual process, especially when the group is just starting out. We hypothesized that it would be easier for a faculty to begin to work together as a Program Group if that faculty was fairly cohesive and had a good deal of collegial interactions to begin with. In schools where there was very little professional or personal interaction among the faculty members, the Program Group would constitute more of a change, and we hypothesized that such faculties would have greater difficulty learning to work together.

Two of our questionnaire scales measured collegial relations: (1) Colleague Relations on the School Survey and (2) Cohesiveness on the evaluation survey. The eight participating elementary schools are identically ranked on the pre-test scores for these two scales, providing some confirmation that the two scales measure similar concepts. Row two of Table 8.4 reports the ranks of the eight schools on these measures, with a dichotomized rank of "1" indicating high collegiality or "2" indicating low collegiality. The former is an indication of relatively high context-program fit; the latter indicates relatively low context-program fit.

The third indicator of program-context fit is the degree to which the school personnel were already going through the stages of a group problem-solving process. We assumed that for schools where such activity was already present, the OD program would merely constitute a formalization of those activities. For schools which have less pre-existing group problem-solving activity, the Program Group would have to adopt a whole new type of faculty behavior.

The third row of Table 8.4 ranks the eight participating elementary schools on their pre-test scores on the seven-stage problem-solving process. A dichotomized value of "1" indicates the presence of more problem-solving activity and thus a higher program-context fit.

The final row of Table 8.4 is a summary value which serves as a gross indicator of initial contextual favorability to the OD program. It is calculated by summing the dichotomized values for each of the three indicators and dichotomizing the sums. Table 8.5 illustrates the various program outcomes for the schools with high and low context-program fit.

An examination of Table 8.5 reveals that there is not a dramatic difference between outcomes for schools with high context-program fit and those with low fit, although the former are higher on all three outcome measures. One complicating factor, however, is that in two of the high fit schools, School A and School G, the Program Group did not continue. In School H, a low fit school, the faculty held a formal vote not to continue the program. It appears that the contextual fit is not the only predictor of program effect, or even of whether the program will become routinized in a school. In the next section, a second explanatory variable, effort, will be the focus, and we will examine whether it illuminates the role of context-fit in the program. Before we look at effort, however, a few points should be made about the contextual variables. First, the participating schools have been dichotomized into high and low contextual favorability in comparison with each other. However, several of the high context fit schools were low when compared with all the elementary schools in the district on the three measures. Thus we have to keep open the probability that our sample was somewhat negatively skewed to begin with.

Another point we would like to make concerns the Cohesiveness or Colleague

Table 8.5

Outcome Measures for Schools with Higher and Lower Context Fit

	School (rank on outcomes)	Number of Solutions	School Survey Improvements	Hypothesized Changes in Evaluation Survey
Higher Fit:	A(5)	5	0	5
	B(1)	9	5	15
	F(7)	5	1	2
	G(3)	3	11	24
	Average	5.5	4.25	11.5
Lower Fit:	C(7)	6	0	4
	D(2)	5	6	15
	E(4)	7	1	2
	H(5)	1	5	5
	Average	4.75	3	6.5

Relations ranking. This ranking did not predict the amount of conflict which emerged in the program. School F and School D, both of which were relatively high in Cohesiveness, experienced a great deal of divisiveness in their faculty as a result of the program. School B, which was initially low on Cohesiveness, was able to utilize the Program Group to bring faculty members closer together. Apparently, the teachers in School F and School D felt good about their collegial relations, but the faculties were large enough so that there were actually subgroups of closely-knit faculty members. The pre-test measures tapped the cohesiveness within subgroups and the program served to emphasize the divisiveness between subgroups by bringing these subgroups together in the same problem-solving group. In School D, the conflict was temporary; a great deal of group time was spent working it out, and on the final questionnaires the school had improved on both Cohesiveness and Colleague Relations and was second highest of the eight schools. In School F, on the other hand, the leader expressed disappointment that the faculty was unwilling to deal with their conflicts in the Program Group meetings, but resorted to complaining and backbiting outside of meetings. The result was that the school fell to sixth of the eight participating schools in this area on the post-test questionnaire administration.

The results in these schools, as well as in several others, implies that initially poor collegial relations were problematic to Program Group functioning only if conflicts and hard feelings were not confronted in the meetings themselves. In schools where a contingent of the faculty refused to participate at all, or did not take an active part in the meetings, conflict and divisiveness continued to characterize the program.

Effort

The initial organizational context defines the extent of the change in organizational functioning that will be required of the school if the program is to be thoroughly implemented. It stands to reason that in schools with an initially unfavorable context (low program-school fit), a greater amount of initial effort will be required to overcome the forces working against the program. Thus, our hypotheses concerning effort take two forms. First, we expect that program outcomes will be greater in schools where the effort expended is greater. This is one of the most basic questions to be asked in a formative evaluation: if the faculty exerts effort in this OD program, are there observable outcomes? Second, we expect that schools which begin with an initially unfavorable context will need to exert more effort to achieve program outcomes comparable to those in highly favorable context schools. This is in keeping with our systems model in which process emerges from the interaction between context and effort.

Interview data provided us with six indicators of effort expended by a school on the OD program. They will be briefly described below.

1) Total number of program group meetings. This is a measure of the total number of Program Group meetings during the two years of the intervention. It ranges from 5 to 27.

2) Leader-monitor time per meeting. This is a measure of the average number of hours spent by the leader(s) and monitor(s) in a school per Program Group meeting. It does not include hours spent in the meetings themselves. It ranges from two to four hours.

3) Use of materials. Leaders and monitors differed in the extent to which they referred to the training materials and program guidelines to help guide the implementation of the OD program. The score on this indicator ranges from 0 to 4. A point was assigned if either the leader or monitor reported making use of these materials either year. Four points were possible if the leader and the monitor used the materials both years.

4) Faculty volunteers. In five schools, faculty members other than elected program personnel became actively involved in carrying out extra activities related to Program Group efforts. This was considered an indication of faculty effort.

5) Percentage of faculty participation. This refers to the percentage of teachers who were regular participants in the Program Group meetings.

6) Number of faculty members trained. After the initial training sessions, there were two additional training sessions to which schools could send leader or monitor replacements and/or other faculty members interested in learning about the program. Attendance at these meetings and the election of replacements was coordinated by members of the school staff, and therefore required initiative from within the school. We therefore consider the number of people who received training to be an indicator of a school's effort regarding the OD program.

Table 8.6 illustrates how each school scored on the six indicators of effort. Once again, we have dichotomized each indicator, to reflect the gross nature of the indicators, and have summed up the dichotomized values to arrive at an overall effort score. The schools were then divided into "high" and "low" effort groups.

Table 8.7 shows the program outcome measures for the schools in the high and low effort groups. As with contextual fit, the results are not dramatic. The high effort schools clearly came up with more solutions, but their questionnaire results are slightly less favorable. We should, however, keep in mind that the very strong improvement in questionnaire data in School G can be attributed at least in part to changes as a result of exposure to the program because of initiative taken by the principal. If that school is removed from the low effort group, both the average improvement in the School Survey and the hypothesized changes in the evaluation survey fall well below comparable averages for the high effort group. We believe that we have fairly good evidence that program outcomes are related to the amount of effort expended on the program; that is, the more human hours expended, the greater

Table 8.6

Indicators of Effort

	School							
	A	B	C	D	E	F	G	H
Total number of program group meetings	9 (2)	23 (1)	10 (2)	27 (1)	20 (1)	18 (1)	5 (2)	5 (2)
Leader-monitor time (in hours per meeting)	3.1 (1)	2.9 (2)	2.0 (2)	4.0 (1)	3.2 (1)	2.1 (2)	4.0 (1)	3.0 (2)
Use of materials*	2 (2)	4 (1)	4 (1)	4 (1)	4 (1)	3 (2)	3 (2)	1 (2)
Faculty volunteers	No (2)	Yes (1)	No (2)	Yes (1)	Yes (1)	Yes (1)	No (2)	Yes (1)
Percentage faculty participation	80 (2)	100 (1)	100 (1)	60 (2)	50 (2)	75 (2)	90 (1)	90 (1)
Number of faculty members trained	2 (2)	4 (1)	2 (2)	6 (1)	4 (1)	5 (1)	2 (2)	2 (2)
Effort	Low	High	Low	High	High	High	Low	Low
Sum of dichotomized scores	11	7	10	7	7	9	10	10

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*This scale ranges from 0 to 4. A score of "0" would indicate that neither leader nor monitor made use of materials provided in training in either the first or second year. A score of "4" would indicate that both leader and monitor used the materials in both years.

Table 8.7

Outcome Measures for Schools with Lower and Higher Effort

	School (rank on outcomes)	Number of Solutions	School Survey Improvements	Hypothesized Changes in Evaluation Survey
Higher Effort:	B(1)	9	5	15
	D(2)	5	6	15
	E(4)	7	1	2
	F(7)	5	1	2
	Average	6.5	3.25	8.5
Lower Effort:	A(5)	5	0	5
	G(3)	3	11	24
	C(7)	6	0	4
	H(5)	1	5	5
	Average	3.75	4.0	9.5

the effect of the program.

Table 8.8 sheds light on our second hypothesis that schools with an initially lower degree of context-program fit will need to exert more effort to achieve a strong program effect than will higher fit schools. Examining this table shows several interesting trends. First, schools A and G, both higher fit schools, experienced some changes in the indicators of program effect despite the relatively lower effort that they exerted. (Once again, the averages in this cell are heavily skewed by School G's strong data change.) In terms of solutions implemented, however, these schools fell below the five schools (B, F, D, E, and C) where the program continued. Of those schools which exerted higher effort, there is almost no difference in program outcome between the two which began with a favorable context and those which did not. It appears that Schools D and E were able to achieve considerable program impact through the hard work of the teachers involved in the program, despite being plagued all along by a relatively low attendance rate, which reflected the lack of contextual support for the program. School B, which began with a higher fit context, also had one of the highest effort scores and achieved the highest program outcome. School F, which was the lowest of both higher effort and higher fit schools, had very low program impact, and a clearer explanation for this will emerge in the next section, in which we will consider the way the OD program was implemented.

A clear finding when the effort indicators are more closely scrutinized is that higher program effect is very closely related to the total amount of time committed by the leader and the monitor in the school. The processes set up by the OD program were set in motion and sustained only through hard work by the program personnel. (In the case of School G, some of the program effect

Table 8.8

Effort-Contextual Fit Matrix
(Program Outcomes as the Dependent Variables)

		Effort							
		High				Low			
		School (rank)	Solutions	School Survey	Evaluation	School (rank)	Solutions	School Survey	Evaluation
Contextual Fit	High	B(1)	9	5	15	A(5)	5	0	5
		F(7)	5	1	2	G(3)	3	11	24
		Average	7	3	8.5	Average	4	5.5	14.5
	Low	D(2)	5	6	15	C(7)	6	0	4
		E(4)	7	1	2	H(5)	1	5	5
		Average	6	3.5	8.5		3.5	2.5	4.5

can be attributed to principal effort.) Although the leader and the monitor in School B, which had a highly favorable context, reported that time demands decreased as the program became routinized (thus explaining the relatively low time per meeting), in schools like D and E, where the context was less favorable, the leader and the monitor continued to have to exert a lot of personal effort to assure smooth and continued program functioning. Furthermore, the experience in School A is evidence that the program will stop if the leader loses interest. Despite a relatively large time commitment to the program during the first year resulting in five solutions, this school did not have the momentum to keep going once the leader stopped spending time on the program.

This finding points out a definite weakness in the OD program as implemented in this district. The fact that the role of leader or monitor was essentially an extra, volunteer task for teachers meant that there was little organizational reinforcement for performing the role well, or encouragement to continue when the going got rough. The leaders in two of the favorable context schools, A and G, were active, ambitious individuals; and although they initially were very enthusiastic about the program, it ended up being a low priority when compared to other activities such as coaching, pursuing advanced degrees, or union-related functions, all of which had personal pay offs and institutional legitimacy that were not evident in the OD program. To do a good job of being a leader or a monitor required performing many extra, time-consuming tasks, with no organizational support such as secretarial help or released time. It is evident that the leaders and monitors who did commit many hours of hard work to the program were dedicated individuals who felt the program was indeed making their school a better place to work. However, a program such as this should have built-in support for their efforts, and should not have to rely on the chance selection of individuals with the time and disposition to take on many extra burdens with no organizational reinforcement.

This also points to the necessity of devising selection procedures for the roles of leader and monitor which enhance the probability of persons with the necessary characteristics being selected. Our experience in these eight schools indicates that it is important that the leader and monitor not be identified in people's minds with one faction of the faculty, as such identification results in the program being viewed as less legitimate by teachers and principal. Also, the leader and the monitor must be sympathetic with systematic, step-by-step problem-solving and implementation procedures, and they should relish interpersonal interactions that are a vital part of successful program functioning.

A second finding is that the program is apparently able to function with less than complete faculty participation. In Schools D, E, and F, a sizable number of teachers did not attend meetings, but a core of highly interested teachers kept the program going. The program in these three schools did not degenerate into a situation where the Program Group members were insensitive to the desires of the non-participants, for the teachers in all three of these Program Groups were concerned that their solutions be representative of faculty opinion. Schools D and E worked particularly hard to overcome the problem of incomplete faculty participation.

One potential indicator of school effort is noteworthy because it is missing from our list of indicators. We expected that principal time spent on the program would differ from school to school. In principal training, several administrators had voiced concern that this OD program would drain a lot of administrative time and energy. In the two waves of structured interviews, however, not one principal complained of spending too much time on the program, and most said that the time they were required to spend was insignificant.

Program Implementation

This section will focus on the extent to which program implementation in the eight schools approached the normative design envisioned by the interventionists. As has been explained earlier, the design of this OD program was based on both theory and research and had implicit within it a "model" of the effective school organization. We have identified five aspects of implementation of the OD program which indicate to what extent the implementation was consistent with that design. They are briefly described below.

1) Leader-monitor teamwork. The dual change agent role, with the complementary functions of group leadership and process monitoring, was designed to increase the probability that a faculty would become a smoothly functioning group. The score on this indicator was based on self-reports by the leader and the monitor each year. If both the leader and the monitor reported working closely together both years, the score was 4. A score of 0 indicated that neither reported teamwork either year.

2) Principal cooperation. Ideally, the principal would see his role as working cooperatively with the Program Group to enable changes which were perceived to be needed by the teachers. Several of the principals did in fact approach the program in this manner. At the other extreme were principals who saw the program as a threat or a nuisance and either did not cooperate with the group at all or complied to the letter but not the spirit of the program, meeting in Review Committees but refusing to lend administrative support or encouragement to faculty efforts.

3) Number of feedback sessions. The use of survey data to facilitate problem identification and provide useful information was envisioned as an ongoing part of the OD program. This part was rejected by some of the staffs, even in schools where the OD program was continued into a third year.

4) Number of components. The various components of the program were the Program, Review, and Policy Groups; the upward and downward communication forms; and the two process monitoring forms. In addition, some schools developed supplemental components such as "mini-questionnaires" to deal with particular problems they were experiencing in the change process.

5) Use of the seven-stage problem-solving process. This process was provided as a conceptual road map for the group's problem-solving efforts. In several schools, it was always present in the leader's and the monitor's minds, and the group was patient enough to go through a systematic process. In several schools, the process followed was not systematic and group efforts tended to abort before solutions were implemented or routinized.

Table 8.9 illustrates how each of the eight schools scored on the indicators of program implementation. Each indicator is dichotomized into a higher and lower group, and the dichotomized scores are summed to give an overall program implementation score. The schools were then divided into a higher and lower group in terms of program implementation.

We hypothesized that the OD program would have greater effect in schools where the program implementation more closely adhered to the normative design prescribed by the interventionists. The results reported in Table 8.10 indicate partial support for this hypothesis. Schools which achieved a higher degree of program implementation did implement considerably more solutions than those schools with a lower degree of program implementation. However, the schools with lower program implementation averaged slightly better in terms of survey data. Once again, if the survey results in School G are not included, the lower implementation schools score considerably below the higher implementation schools on all three indicators of program effect. The results in School G indicate, however, that perceptual measures can be affected even if program implementation differs substantially from the prescribed design. In the case of School G, the principal utilized faculty meetings to achieve some of the improvements in school functioning which the interventionists had expected to occur through the Program Group. With the exception of this school, however, it does appear that close adherence to the design of the OD program resulted in greater program effect.

Table 8.9

Indicators of Program Implementation

	School							
	A	B	C	D	E	F	G	H
Leader-monitor teamwork*	1 (2)	4 (1)	4 (1)	3 (1)	3 (1)	2 (2)	1 (2)	1 (2)
Principal cooperation**	High (1)	High (1)	Low (2)	High (1)	Low (2)	Low (2)	High (1)	Low (2)
Number of feedback sessions	1 (2)	2 (1)	2 (1)	2 (1)	1 (2)	1 (2)	2 (1)	1 (2)
Number of components	4 (2)	7 (1)	5 (1)	8 (1)	6 (1)	3 (2)	2 (2)	2 (2)
Use of seven-stage process	Yes (1)	Yes (1)	No (2)	Yes (1)	Yes (1)	No (2)	No (2)	No (2)
Program implementation	Low	High	High	High	High	Low	Low	Low
Sum of dichotomized scores	8	5	7	5	7	10	8	10

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*This scale ranges from 0 to 4. A score of "0" would indicate that neither the leader nor the monitor reported high teamwork either year. A score of "4" would indicate that both leader and monitor reported high teamwork both years.

**Principal cooperation refers to observable behavior rather than expressed attitudes. In one case, a principal cooperated fully with the group, despite his own admitted reservations and even dislike for the OD program.

Table 8.10

Outcome Measures for Schools with Higher and Lower Program Implementation

	School (rank on outcomes)	Number of Solutions	School Survey Improvements	Hypothesized Changes in Evaluation Survey
Higher Implementation:	B(1)	9	5	15
	D(2)	5	6	15
	C(7)	6	0	4
	E(4)	7	1	2
	Average	6.75	3	9
Lower Implementation:	F(7)	5	1	2
	H(5)	1	5	5
	G(3)	3	11	24
	A(5)	5	0	5
	Average	3.5	4.25	9

We expected that the program implementation would more closely adhere to the prescribed design if the context was more favorable to the program and effort was higher. Table 8.11, however, presents evidence that the degree of program implementation was higher when effort was high (as expected) but contextual fit was low. Three of the four higher effort schools and only one lower effort school had a high degree of program implementation. Only one higher fit school obtained a higher degree of program implementation. Schools A and G were lower effort schools largely because of the lower effort expended by the leaders. Even in a highly favorable context, the design of the OD program could only be implemented with a significant amount of human effort.

School C is an exception to this last point. It apparently achieved a high degree of program implementation despite low effort and low contextual fit. There was a cooperative leader-monitor effort in this school, which appears to be an essential ingredient of successful program implementation. However, the implementation in School C appears to have conformed to the letter but not to the spirit of the program. The program did not make much impact on the school's context. The problem solutions which were implemented were only half-heartedly utilized, and the problem-solving process was not systematic. The leader and the monitor were simply unable to generate much enthusiasm for problem solving among the staff, or to overcome the principal's basically skeptical views of the program. Thus, this was one school where a higher degree of program implementation did not achieve a higher amount of program effect, probably because of the unfavorable context.

School F is another exception in Table 8.11. Despite high effort and high contextual fit, it did not achieve a high degree of program implementation or program effect. In this case, the essential ingredient of leader-monitor

Table 8.11

Effort-Contextual Fit Matrix
(Degree of Program Implementation as the Dependent Variable)

	Effort			
	High		Low	
Contextual Fit	School	Program Implementation	School	Program Implementation
High	B	High	A	Low
	F	Low	G	Low
Low	D	High	C	High
	E	High	H	Low

teamwork was missing. Many of the role behaviors specified for these two roles were not carried out. Given the principal's basic opposition to the program, and the factionalized nature of the faculty, it is the opinion of the interventionists that the context in School F was relatively inhospitable to the program, despite how it scored on our measures. (This, of course, raises an issue concerning the validity of our measures.) In any case, the failure to implement many aspects of the program had a definite negative impact on the effectiveness of the OD program in this school.

Table 8.12 illustrates program outcomes according to the amount of effort and the degree of program implementation. Visually, it is clear that effort and degree of implementation are in general highly related. Once again, the higher effort and higher program implementation schools score considerably higher in terms of solutions, but not in survey results. The results for the lower effort-lower implementation schools are skewed by School G.

Table 8.13 characterizes each of the eight schools according to contextual fit, effort, and program implementation and presents the program outcomes for each. It also gives the program status in each school as of the termination of the intervention activities.

Feedback and Adjustment

The implementation of the OD program over the two-year period of the intervention was a dynamic process. Earlier sections of this chapter have not adequately captured this aspect of the project and have presented a fairly static formative evaluation, which considered only initial and final organizational states and lumped each of the other indicators into a single measure for each school, which gives the illusion of representing phenomena that were consistent or homogeneous through time. In fact, as the case studies may

Table 8.12

Effort-Program Implementation Matrix
(Program Outcomes as the Dependent Variables)

		Effort							
		High				Low			
		School (rank)	Solutions	School Survey	Evaluation	School (rank)	Solutions	School Survey	Evaluation
Program Implementation	High	B(1)	9	5	15	C(7)	6	0	4
		D(2)	5	6	15				
		E(4)	7	1	2				
		Average	7	4	10.67				
	Low	F(7)	5	1	2	A(5)	5	0	5
						G(3)	3	11	24
						H(5)	1	5	5
						Average	3	5.3	11.3

Table 8.13

Summary: Contextual Fit--Effort--Program Implementation--Outcomes

School	Status	Contextual Fit	Effort	Program Implementation	Number of Solutions	School Survey Improvements	Hypothesized Changes in Evaluation Survey	Outcome Rank
B	Continuing	High	High	High	9	5	15	1
E	Continuing	Low	High	High	7	1	2	4
D	Continuing	Low	High	High	5	6	15	2
F	Continuing	High	High	Low	5	1	2	7
C	Continuing	Low	Low	High	6	0	4	7
A	Stopped meeting	High	Low	Low	5	0	5	5
G	Stopped meeting	High	Low	Low	3	11	24	3
H	Officially terminated	Low	Low	Low	1	5	5	5

have made obvious, the OD program evolved through time in each school. This final section will characterize the feedback and adjustment processes which occurred in the various schools.

There were three basic forms of negative feedback from the context which resulted in adjustments in the program implementation: (1) faculty conflict, (2) low faculty participation, and (3) negative feedback from the principal. The various ways in which these three forms of feedback were manifested will be discussed below, along with the various kinds of program adjustments which resulted. Program adjustments will be characterized as follows.

1) Design adjustments--changes in the components used or introduction of new components tailored to the individual school situation.

2) Changes in the context--so that it became more congruent with the program. In particular, this took the form of direct attempts to increase collegiality among the teachers or to alter the relationship between the principal and his staff.

3) Changes in the decision domain--so as not to arouse resistance from others who feel the group is making decisions in areas where it does not have necessary authority, knowledge, or expertise.

4) Changes in program personnel (leader or monitor)--to alleviate particular personality clashes or to encourage participation from new groups of faculty.

Faculty Conflict

This form of negative feedback occurred when various groups or individuals within a faculty conflicted with one another over the proper areas of concern for the group, proposed solutions, or the program itself. This conflict sometimes surfaced during meetings, but just as often took the form of backbiting and griping outside of meetings. It was especially present in situations where the leader was highly identified with a subgroup of faculty members or a particular point of view. In several instances, deliberate changes in program personnel were introduced to try to find a person more neutral in the eyes of the faculty or better able to involve currently inactive groups in the OD program. Other adjustments made in the program to deal with faculty conflict included attempts to change the context, in particular to improve working relationships between faculty members through such methods as potluck lunches to provide an opportunity for faculty to be together informally. In two cases, there was an attempt to make conscious determinations of the decision domains that the group should be dealing with in order to avoid conflict in this area. Both groups made a conscious evolutionary progression from dealing with contextual irritants to moving to more central educational issues. Finally, two schools developed new components to minimize conflict. Specifically, one school distributed complete minutes from every meeting to alleviate long arguments over what the group had "decided" the week before and agendas for upcoming meetings to alleviate conflict in discussing "what we ought to do today." Another school introduced the utilization of "mini-questionnaires" to get objective data concerning teachers' opinions on issues to be discussed, which helped reduce the amount of arguing over "how the staff felt" about certain issues. One group officially terminated the program because a great deal of conflict had become manifest over a particular solution.

Low Participation

This form of negative feedback was a particular manifestation of conflict in the faculty. There were two kinds of adjustments made to this situation. In one school, at the end of the two years a new leader was selected who was highly regarded by a contingent of the faculty that had not been active in the program. This was consciously done by the previous leader to broaden the representative base of the Program Group. A change of personnel in another school also had the effect of increasing program participation. A second approach to the problem was to develop components designed to integrate Program Group efforts with non-participating faculty. One school was considering having group members personally report the results of the meetings to non-participants and find out their viewpoints, so that they could be taken into account by the group. Two faculties introduced the practice of bringing proposed solutions up for discussion in formal faculty meetings if they involved a lot of non-participating teachers.

Principal Feedback

Negative feedback from the principal took various forms, including unwillingness to meet in Review Committees, downgrading of group efforts for stated reasons such as lack of representativeness, not cooperating with the group in implementing changes, or simply giving verbal indications of concern that the group was overstepping its bounds. In one case, a Program Group tried to change the context in which it operated--i.e., made changes in the principal-faculty information flow to try to create more cooperative efforts. In four cases, the groups altered their decision domains based on feedback from the principal. Three schools altered the design, holding regular Review Committee meetings to keep the principal informed, rather than limiting such meetings to times when legitimation of solutions was needed.

Summary

Table 8.14 presents a list of schools, type of negative feedback, and adjustments made. It does appear that schools were able to make adjustments in program implementation as time went by and the group began to get feedback from its context. We hypothesized that such adjustments would be more

Table 8.14

Occurrence of Negative Feedback and Adjustments

School	Types of Negative Feedback	Adjustment Efforts
A		(Program stopped)
B	Faculty conflict	Design, Domain
C	Principal feedback	Domain, Context
D	Principal feedback	Domain, Design
	Faculty conflict	Domain, Personnel
	Low participation	Design
E	Principal feedback	Domain, Design
	Faculty conflict	Context, Design, Personnel
	Low participation	Design, Personnel
F	Principal feedback	Domain
	Faculty conflict	Context, Personnel
	Low participation	Personnel
G		Design (by principal)
H	Faculty conflict Principal feedback	(None--voted to terminate)

prevalent in schools with an initially incongruent context. Table 8.15 presents a breakdown of each school and the kinds of adjustment processes which occurred. It can be seen that such adjustments occurred in both high and low fit schools, although they are more prevalent in low fit schools.

We hypothesized also that such adjustments would be more prevalent in high effort schools. The information in Table 8.15 indicates that this is indeed true. Only two adjustment processes occurred in low effort schools. Indeed, one might surmise that much of the effort expended in high effort schools was spent trying to tailor the program to the individual school context. This also explains why there is not a more consistent relationship between effort and context and program outcomes. The strategies chosen to tailor the program and context to one another were not always successful. In School F, for instance, efforts to confront the problem of faculty divisiveness and negative principal reactions were simply not effective, and these problems remained salient at the second administration of the questionnaire. In the three other high effort schools, adjustment processes were working quite well, and program outcomes were high.

In three of the low effort schools, the project terminated before the intervention ended. In two of these schools (A and G) there did not seem to be a great deal of negative feedback, probably because the context was congruent with the program. This could be responsible in part for a relatively small expenditure of effort, lack of full implementation, and failure to tailor the OD program to the school. In School G, there is evidence that the context was so congruent that the concepts of the OD program were assimilated into the existing authority structure, rather than a mutual accommodation occurring.

Table 8.15

Adjustment Processes

School	Contextual Fit	De[illegible] Adjustm[illegible]	Contextual Alteration	Domain Adjustments	Changes in Personnel*	Effort	Outcome Rank
B	Higher	Yes	No	Yes	No	Higher	1
D	Lower	Yes	No	Yes	Yes	Higher	2
G	Higher	Yes	No	No	No	Lower	3
E	Lower	Yes	Yes	Yes	Yes	Higher	4
A	Higher	No	No	No	No	Lower	5
H	Lower	No	No	No	No	Lower	5
C	Lower	No	Yes	Yes	No	Lower	7
F	Higher	No	Yes	Yes	Yes	Higher	7

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* In this chart, "Changes in Personnel" refers only to such changes as were made because of negative feedback, and not because of teacher turnover or desire of the leader or the monitor to step down for personal reasons.

It must be pointed out that in Schools A and G the relatively high congruence between program and context existed from the beginning, and we suspect it may have had a substantial impact on the type of leaders elected by the faculty. Since there already was some degree of problem-solving activities present in the schools, there were individuals who were identified by other faculty members as being skilled, or at least active, in such activities and who were logical choices for the roles of leader and monitor. These individuals were ambitious and active and could, almost by definition, be expected to have a relatively high stake in the established order of things in their schools. Thus, their motivation to expend time and effort was not as high as in less congruent schools, where the motivation resulted from a greater degree of felt need.

In the third school in which the project terminated, School H, the context was incongruent and there was no effort made to adjust the program implementation despite a great deal of negative feedback. Table 8.15 clearly shows that the number of program adjustments is related to outcome. The four schools which were highest in outcome rank performed twice as many (10) adjustments as the four schools which were lowest in outcome rank (5).

This suggests that a "dynamic tension" is not only not detrimental to new program implementation, but may be necessary to evoke effort and commitment to the process. Furthermore, when such a "dynamic tension" is present, as it probably was even in the relatively congruent contexts, it might take the effort of capable and conscientious program personnel to bring the underlying tension to the attention of the group and to work through the ramifications. It is through this process of actually "developing the organization" that satisfaction with the program emerges and the desire to continue is instilled.

Summary

Using a large amount of qualitative data and a systems model for formative evaluation, we have discovered some explanatory patterns in the experiences of the eight schools which implemented the program. Looking at variables dealing with contextual congruence, effort,and degree of program implementation, we have found the following.

Contextual congruence in and of itself does not appear to predict outcome or program continuation. Program outcome, particularly the number of problems solved, does appear to be the result of the amount of effort put into the program in the various schools. The amount of effort was clearly related to the extent of implementation of the design of the change program. Leader-monitor teamwork appears to have been present in all schools which attained a high degree of implementation and expended a great deal of effort, as well as in most of the high outcome schools.

Taking a dynamic, feedback and adjustment oriented approach to viewing the system clarifies the unpredicted, ambivalent role of context in the change efforts. It appears that development of the school organization occurs over time through a gradual process of accommodation and assimilation. The new design implied in the OD effort is not simply rejected or accepted. Rather, it serves as an "ideal" for the schools to try out. In the process of trying it out, the tensions between the new and the pre-existing structures and processes become apparent, and a process of adjustment occurs. In this way, the program is adapted to the context, and vice versa. In schools where this adjustment did not successfully occur, for whatever reason, program effect was limited.

CHAPTER NINE

SUMMARY ASSESSMENT UTILIZING DECISION MAKING AND EVALUATION MODEL

The Stufflebeam *et al*. Typology

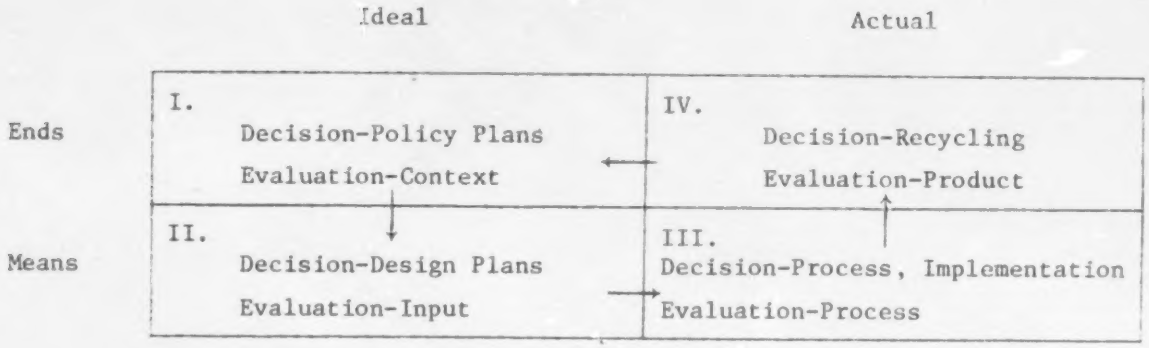
This chapter will place this project report in the evaluation framework of Stufflebeam *et al*. (1971). According to this framework, there are four kinds of organizational decisions, each of which corresponds to a type of evaluation. The model is shown in Figure 9.1.

Cell I refers to policy or planning decisions, which specify major changes that are needed in an organization or program and the objectives of the program. It should be based on an evaluation of the context and determination of failure of the existing program to meet its objectives or reach its potential.

Cell II refers to design or structuring decisions, which specify the means to achieve the ends established as a result of the planning decisions. Input evaluation provides information to determine how best to achieve the objectives utilizing the available resources.

Cell III refers to implementing decisions, which are involved in carrying through the plan and implementing the strategy which has been determined. Process evaluation collects information to keep a record of the implementation and detect strengths and weaknesses to provide feedback to those responsible for planning and implementation.

Cell IV refers to recycling decisions, which involve judging and reacting to the results of the program. Product evaluation measures and interprets the results either during or at the end of the implementation cycle.



	Ideal	Actual
Ends	I. Decision-Policy Plans Evaluation-Context	IV. Decision-Recycling Evaluation-Product
Means	II. Decision-Design Plans Evaluation-Input	III. Decision-Process, Implementation Evaluation-Process

Figure 9.1. Decision-evaluation typology.
Adapted from Stufflebeam *et al.*, 1971.

This section will trace this OD project through the four steps as described in this report. The next section will make a concluding assessment of the accuracy of the original context and input evaluation and of the appropriateness of the objectives and strategies involved in the OD project.

Overview of This Report Utilizing
Stufflebeam and Others' Evaluation Typology

The Organization Development program was conceived of by university-based researchers specifically in response to what they perceived to be organizational needs of the public schools and current knowledge and practice in the field of organization theory and development. In effect, context evaluation and the determination of objectives were the result of the synthesis of educational and organizational literature reported in Chapter One, as well as the experience of the researchers dealing with schools in various capacities. The establishing of faculty collective decision-making capabilities in schools to supplement existing authority decision structures was believed to be a desirable goal in order to provide a mechanism to reduce technical core uncertainty, to enhance organizational flexibility, and to increase organizational effectiveness. The introduction of formal roles and structures to support collective faculty decision making and of a systematic change or problem-solving process to guide the decision makers were believed necessary to the integration of the technical core problem solving with the authority structure and to provide a base for effective faculty initiated change efforts. Collective decision making in the context of such structural and process supports was predicted to positively affect teachers' sense of influence in the schools and satisfaction with their work situation.

The second cell in Stufflebeam's model, involving design plans and input evaluation was also performed by the researchers, based on a generic concept of elementary schools and current knowledge and practice in the field of Organization Development. The program was to be designed to introduce and institutionalize collective processes in educational systems. Chapter One provides a description of the design of this particular OD program and the research providing the rationale for each component.

Most immediately, this intervention was an expanded and somewhat altered version of an OD program designed and tested in a field experiment by Coughlan, Cooke, and Safer (1972). The evaluation of that project provided information which was utilized to make changes for the implementation described in this report. The very positive results of the change program when it was tested by Coughlan _et al_. provided strong evidence for its value in addressing the organizational problems experienced by schools and in achieving the objectives described above.

The key components of the original design by Coughlan, Cooke, and Safer which were retained for the current implementation included:

1. the use of _peer groups for collective problem solving_
2. a series of _overlapping groups_ to integrate the peer groups with the authority structure
3. the utilization of _survey feedback_ to initiate change efforts
4. the strong _task-oriented_ nature of intervention activities
5. the high reliance on _formal, written communication_ between groups and to support change implementation
6. the _training of internal change agents_ to feed back data and lead the group in problem-solving activities.

Additions to or expansions of the components of the original design which were tested in this intervention included:

1. expansions to a _district-wide intervention_ (the earlier study involved individual schools from several districts)

2. creation of a peer-level principal problem-solving group
3. training for all principals in the district
4. training of two internal change agents for each school-level Program Group, the leader responsible for leading the group in its tasks and the monitor responsible for process observation
5. further articulation of the relationship between the seven-stage problem-solving process and the components of the program
6. expansion to two years of intervention and training to determine the lasting power and problems of continuation of the program over time.

In addition to testing additional components, the study described in this report was designed to get in-depth information concerning the processes involved in the intervention. The research related components were thus expanded. Research components were described in Chapter Three of this report.

At this point, a few remarks should be made about the role of the "host" school district in context and input evaluation and, correspondingly, in planning and designing the intervention. The researchers had hoped that the district which agreed to become a research site would do so based on an evaluation of its own context and the intervention design and a determination of a basic fit between the needs of the district and the design of the intervention. We had anticipated that through a mutual effort, alterations could be made to fit the intervention more specifically to the context at hand. To some extent this did occur under the original Superintendent. The implementation effort in the high school was a direct result of his feeling that it would be detrimental to the district to single out elementary schools for the OD project. A steering committee also provided valuable assistance in determining how to initiate the project in the schools.

Two factors worked against a more active district role in this respect. First, the departure of the Superintendent left the project without a real advocate at the district office level. Second, the change model inherent in the intervention design was sufficiently distant from current practices in the district that it was hard for district administrators to feel a need for the effort. There was a sense of "we want to see it work before we decide to try it," which is an indication of the type of district the project was in. This district was willing to try out programs new to it, but was not anxious to experiment with relatively untested innovations. Thus, the stance of the district toward the OD effort was reactive.

Cell III of Figure 9.1 deals with implementation and process evaluation. The general implementation of the OD program was described in Chapters Two and Five of this report. Implementation in specific schools was described in Chapter Seven. Process evaluation was an ongoing effort, conducted jointly by the project personnel (leaders, monitors, and principals) in the participating schools and by the research team. During the course of the two years, the design was altered as problems or "holes" became apparent. This alteration occurred both at the school level, as the personnel in each school made changes to fit their school context, and at the project level, as the research team made changes to reflect feedback we were receiving from all participating schools. The final section of Chapter Eight dealt specifically with the alterations of the program which occurred at the school level.

The formative evaluation, reported in Chapters Seven and Eight, is essentially an attempt to discover patterns in the experiences encountered by the eight schools which implemented the OD program. The researchers collected and ordered the many sources of data available concerning the project from each school, utilizing a basic systems model as a guide. Context, effort, and implementation variables were scrutinized in order to determine how these affected the results or output of the OD project in the various schools.

Cell IV of Figure 9.1 deals with the recycling decision and product evaluation. Chapter Six of this report described the summative evaluation, which presents "hard" data concerning program effect, including questionnaire data indicating some perceptual increases in favorability, documentation of problems confronted and solved by the Program Groups, and final interview data tapping the attitudes of district personnel toward the OD program. At the conclusion of the formal intervention, five schools indicated that their faculties had decided to proceed with the program for at least another year. Three elementary schools and the high school had stopped program activities, one by formal vote and the others by tacit agreement. The district office indicated a willingness to cooperate with Program Group efforts of the five continuing schools, but there were no plans for any district-level encouragement of an expansion of the program.

Context and Analysis:

What Have We Learned about Schools and the OD Program?

This section will return to Cells I and II of Figure 9.1 and review the original context input analysis that led to the particular objectives and design of the OD program. The information provided in the process and product evaluations is a basis for reconsidering our theoretical assumptions and development strategies. The generalizations which will be made must be treated with some circumspection, however, since they are based on experiences in only one school district.

Context Evaluation

Our experiences in this district have confirmed the general theoretical development calling for collective decision processes to supplement authority decisions in schools. Many of the teachers with whom we interacted felt frustrated by efforts to participate in authority decisions through committees, as they felt that the resulting decisions often did not address the problems they confronted in their actual day-to-day teaching or that their input was ignored. A close look at the problem areas dealt with by the Program Groups indicates that the decisions and solutions produced by these groups did not involve the policies and programs which are generally conceived to be authority decisions, but dealt with how to make these programs work at the technical core level. Such areas as coordination of efforts of special and regular classroom teachers, deciding on student placement, passing information from teacher to teacher concerning a child's progress, and exchanging more information about scheduling, materials, and resources in the school are all directly related to making the total effort in the school more effective and better coordinated. A major benefit of the OD effort that was reported by participants was the increase in communication between teachers. So often it was couched in terms like, "finally we are talking to each other about our work," that we can not help but feel that this sort of professional interaction is a need that has too long been frustrated in many schools.

Interview data provide some confirmation that roles did change as a result of the program, at least for the principal, leaders, and monitors. The increase in perceived variety in the jobs of teachers in participating schools that was reported in the questionnaires indicates that the roles of other teachers in these schools had also expanded. We have much evidence that the new structures, the Program Groups, and the Review Committees were fully implemented in five of the eight participating elementary schools and were routinized in three of those schools.

These new structures and roles appear to have been integrated with the authority structures in most of the schools. Many problem solutions received legitimation and even active assistance from building-level and district-level administrators. Interview data indicate that in most schools this integration was accomplished without loss of influence by the principal, even though the teachers as a group were beginning to perceive themselves as having more influence in their schools. Furthermore, it seems to have been accompanied by an increase in knowledge and awareness of the school situation and greater communication by both teachers and principals.

There were several schools where integration of collective decision-making structures with the authority structures was accomplished only by hard work and sensitivity by the leaders and monitors. Two schools were still working to achieve such integration. One other school had terminated the project, at least partly because of the problem of fitting the Program Group into the pre-existing mode of functioning. This points to a problem which may have been insufficiently addressed in our theoretical development and context evaluation, namely, the issue of power and influence in the schools. Our experience points out that professional problem solving was not welcomed by many principals and that several principals were not even willing to cooperate with such efforts. This appears to relate not only to their personal desire for power and influence, but also to the accountability and responsibility structure in school districts. More work needs to be done to conceptualize how this program fits into this structure, how to introduce it into a district in a way which does not threaten principals, or how to make more explicit the differentiation between the collective and authority structures and responsibilities.

In the theoretical development in Chapter One, we suggested that the introduction of collective decision structures should result in teachers having a greater sense of influence and experiencing more satisfaction with their work situation. Our questionnaire data indicate that over the duration of the intervention, teachers in participating schools began to participate more in operational or teaching decisions and that their satisfaction did increase during the course of the intervention to a greater extent than that of teachers in the non-participating schools.

Organizational flexibility and organizational effectiveness were both predicted to increase as a result of the implementation of collective decision structures and processes. Although we have no "hard" data on the former, we do have strong evidence that there was an increase in problem-solving activities in the participating schools. This, coupled with the fact that the Program Groups were addressing different problems from a new perspective (i.e., the faculty as a group), would indicate increased organizational capacity to deal with its technical core environment. We have limited evidence that teachers in participating schools felt their schools were beginning to more effectively accomplish some educational goals.

Input Evaluation

In this section we will present our findings concerning the major design elements of the OD program. The use of peer groups for problem solving and overlapping groups for integration and legitimation purposes appear to be sound design components. We have altered or expanded our concepts in some regards, however, as a result of the close process observation.

First, we have learned that a Program Group can function with less than

100 percent attendance, although this presents the added task of developing ways to integrate its efforts with the rest of the faculty as well as with the authority structure. In retrospect, it seems evident that this type of activity will appeal less to some teachers than others and that unless such problem solving becomes a formal part of the teacher's role, it is unrealistic to expect full faculty participation. This, however, should not be used as an excuse to prevent those who are interested in solving problems from doing so.

Second, we have found that in some schools the Review Committee was convened after each Program Group meeting, rather than just when it was necessary to review a completed decision. This not only kept the principal more informed and less threatened, but also gave the group regular feedback about the principal's reactions to their efforts, and in some cases they received information that affected their eventual decision. In other schools, the Review Committee functioned successfully when convened only as needed to legitimate solutions.

The Policy Group did not function as we had anticipated. Only rarely did a district administrator, principal, and Program Group leader actually sit down together to review a solution. The process tended, instead, to be handled in an ad hoc manner, by letter or informal meeting. The district administrators did not overcome their habit and preference for dealing directly with the principal, although in many cases they were successfully approached by Program Groups. Perhaps given the time constraints of district administrators, a more organic approach to the Policy Group is necessary.

The survey-feedback component was a vital element in beginning and directing Program Group efforts in most schools. Groups differed, however, in their ongoing use of the data and particularly of the second wave of data.

For several schools, feedback of the second round of data served as a motivator in that the teachers and principal could see improvement as a result of the efforts of the group. Perhaps the most general and important function of the data was to serve as a cue to the teachers that their efforts in the areas covered in the survey were legitimate. On the other hand, tension and disillusionment resulted when they exerted effort in survey-related areas but did not receive administrative cooperation. This points once again to the necessity to clarify expectations of areas of responsibilities and legitimate group effort early in the program.

The expansion to a dual change agent role with the training of complementary leader-monitor roles was a successful strategy where a cooperative relationship was established. The leadership role in a very active Program Group was demanding, and continued enthusiasm was more easily maintained with two people sharing the load. Working through the early problems of group functioning was also more effectively accomplished with the sharing of ideas and perspectives of the two individuals. In cases where cooperation between the two individuals was not easily achieved, friction between the leader and the monitor posed one additional obstacle to program functioning. However, the advantages of the dual role, if the two roles function in a complementary fashion, seem to outweigh the possible negative consequences, if they do not.

Perhaps the biggest unanswered question concerns the selection procedures which should be used to assure that individuals who assume the roles of leader and monitor are motivated, competent, and have sufficient respect from the other teachers in the school to assume leadership roles. One important aspect of this selection process was lacking in this intervention. In this district, the administration did not attach enough organizational importance to the program and the roles to ensure the willingness of the teachers to fully consider the requirements of the roles and the individuals most qualified to carry them out. Nor were these requirements made sufficiently salient to the faculty by the interventionists.

The conceptual articulation of the seven-stage problem-solving process with program structures, processes, and documents was very important in facilitating group functioning. Interview evidence is very strong that for many leaders, monitors, and principals, this was the most helpful "tool" they gained from the program. It served as a sort of "road map" for guiding the group and utilizing the structures available.

Expansion to a district-level intervention was less successfully achieved than had been hoped, for reasons that have been described in the second chapter. Likewise, the weakening of the Principal Group because of partial participation was also a blow to our intentions to test an expanded version of the intervention. (The earlier intervention did not include problem solving at the principal level.) The success of that group in accomplishing some changes that had been desired by the principals gives us the expectation, however, that in a district with top administrative support the Principal Group could be an important part of a district-wide intervention. Likewise, we have no reason not to believe that district-wide impact would have been achieved had all schools in the district been willing to try out the program. Evident administrative support would have helped in that regard, also. However, as we did not get a chance to test either an active district-wide Principal Group or involvement of all schools, we are not able to make any claims in this respect. Only further research can answer this question.

Finally, we can make some observations about the lasting power of the OD activities. Even in the absence of overt district-level support, and in some schools of principal support, five of the original eight participating elementary schools voted to continue the program into a third year, after termination of the official intervention activity. Several of these schools had worked through some difficult situations, and in two of them the program was still not completely routinized. In the other three, the program seemed firmly implanted; several additional teachers had received training; and it seemed likely that the program would continue as long as there was faculty interest and teachers remained in the building who had the interest and training to be leaders and monitors. We do believe, based on our experience, that minimal periodic training (one to two days) for new leaders and monitors would be necessary to take care of the problems of teacher turnover and leadership changes for other reasons. We see no reason, however, why these training needs could not be met by individual coordinators from within the district if the district were committed enough to support the training and activities of such persons. Outside consultants or a cooperative relationship with university-based trainers is another possibility. We thus see lack of district commitment as the major potential obstacle to program continuation in this and other districts which might adopt the program.

CHAPTER TEN

FINAL COMMENTS REGARDING THE APPROPRIATENESS OF THIS ORGANIZATION DEVELOPMENT PROGRAM

Chapters Six through Eight of this report utilized a systems model to evaluate the OD project. Chapter Nine placed the report within the evaluation model of Stufflebeam _et al_.. This chapter will take a "problem-solving" approach to the evaluation of the program (Pondy, 1977). Pondy has suggested that several models should be used to evaluate both the goals and attainments of any social problem. In a problem-solving approach, we must ask such questions as: (1) are the goals of the program important? (i.e., what is the problem?); (2) are there other ways to attain the same goals? (i.e., what possible solutions exist?); (3) is this program a good way to attain the goals? (i.e., is this the best solution to the problem?); and (4) how does this program interact with other programs and goals over time? (i.e., what are the unanticipated consequences of the program?).

This chapter will have two parts. The first will consider alternative approaches to the same goal and, in effect, will discriminate between this intervention and other possible strategies for Organization Development. The second will look at the goals of this program in the context of the public schools and make some comments about how this might fit in with the complex task of improving the educational system.

Alternative OD Strategies

This intervention has taken a system-wide structural-process approach to Organization Development. The survey-feedback problem-solving process was "built into" the participating schools through the problem-solving groups. There was a new structure initiated into the organization to carry out the survey-feedback problem-solving activity. In this sense, the current

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[1] For a more complete discussion of strategies for change, see Zaltman and Duncan (1977).

intervention was more comprehensive than many purely survey-feedback interventions in that it focused on integrating the survey-feedback process into the structure of the organization. There was a formal group in the organization whose legitimate task was to do the survey-feedback problem-solving activity.

At this point, we should identify and briefly discuss alternative OD technologies that might be used to accomplish the objectives of the intervention under discussion. The immediate objective of the current intervention was to improve the problem identification and solving process of the participating schools. A more long-term objective was to improve the overall effectiveness of the schools. Huse (1975) provides a good overview of the different types of OD intervention strategies. Table 10.1 presents a typology of these different techniques according to "depth" of intervention. By depth of intervention we mean the degree to which the intervention strategy is directed toward value-laden, emotional involvement of the individual (Harrison, 1970). Each of the techniques presented in Table 10.1 is oriented toward a deeper level of involvement. We will briefly discuss each of these four approaches.

The system-wide approaches focus on the organization itself rather than on particular individuals or groups. The present OD intervention falls into this category. These approaches are not concerned with directly changing individual attitudes, values, or beliefs. Rather, they focus on changing the operation of the system first with the view that behavior will follow. The current OD intervention combines survey feedback and organization design by designing the survey feedback through the Program Groups into the ongoing function of the school.

Table 10.1

A Typology of Organization Development Strategies by Depth of Intervention[1]

System-wide Approaches

Organizational Design (Galbraith, 1973)

Survey Feedback (Miles *et al.*, 1969)

Organizational Confrontation Meeting (Beckhard, 1967)

Grid Organizational Development (Blake & Mouton, 1969)

Individual/Organizational Interface Approaches

Job Design (Maher, 1971)

Role Analysis (Huse, 1975)

Management by Objectives (Odiorne, 1965)

Interpersonal Behavior Approaches

Process Consultation (Schein, 1969)

Third-party Intervention (Walton, 1969)

Team Building (Huse, 1975)

Improving Interdepartmental and Intergroup Intervention (Huse, 1975)

Intrapersonal Analysis and Relationships Approaches

Laboratory Training (Golembewski, 1972)

Personal Consultation (Hall, 1976)

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[1] Revised from Huse (1975, p. 79).

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Individual-organizational interface approaches focus on the task-related behavior of the individual. Approaches here focus on job and role design so that the individual's effort can be more effectively tied into the organization. Job design, role analysis, and management by objectives all focus on better defining and structuring the individual's role in the organization so that the individual will have a clear understanding of what is expected of him/her and what opportunities there are for individuals to satisfy their particular needs through their work in the organization. The current OD intervention does not focus primarily on this approach, although there are some components of job design and role analysis in the training component of the OD program. Time was spent with the program leaders and program monitors to help them better understand their roles and the specific responsibilities they would need to carry out.

As indicated earlier, one problem that both program leaders and program monitors encountered was in defining and carrying out their respective roles. With the benefit of hindsight, the current OD program should be expanded to focus more on the role development of the leaders and monitors. A modified Job Expectation Technique (JET)(Huse, 1975, pp. 180-182) should be used during the training sessions. Specifically, program leaders and monitors should meet together and discuss their roles, particularly with respect to how they need to complement one another's activity. They could then develop, for example, some very specific guidelines with respect to how they could help one another during the Program Group meetings. This technique would lead both leaders and monitors toward a much clearer understanding of their respective roles. It would also allow the specific roles to be developed with respect to the strengths and needs of the particular individuals involved.

The interpersonal behavior approaches focus on how interpersonal behavioral issues affect the ways in which work groups get their work done. The emphasis here is on helping work groups to identify and solve interpersonal problems which often affect how the group is able to solve work-related problems. The current OD intervention did not focus directly on interpersonal issues. Its focus was more concerned with the problem identification and solving process, i.e., task-oriented behavior of the Program Groups. It was not concerned with interpersonal issues because we took the view that this type of intervention activity was too "deep." Operating at the "feelings" level is more risky and dependent on the skills of professional consultants to help the groups work through interpersonal issues. The current OD intervention had a primary objective of developing the skills to implement the OD program in the participants and thus reduce the need for outside professional consultants. Interpersonal issues were not stressed.

In retrospect, from our analysis of the Program Groups and how they functioned, it becomes apparent that some team development activity might be appropriate to get the groups functioning more effectively. Team building focuses on individuals in work groups exploring their interpersonal behaviors as they affect how the work gets done. One modification in the existing design might be for the Program Groups in each school to have either a day or half-day set aside where they can spend some time looking at how they operate as a problem-solving group and identifying any interpersonal issues that it might be necessary to work on. Having the Program Groups better able to diagnose and work on interpersonal issues as they arise in the problem-solving process would provide the groups with additional resources to reduce the possibility of a group getting bogged down as it was trying to work on difficult problems. Here it would be important for the Program Groups to have access to experts in process consultation to do the team building.

The intrapersonal analysis approaches focus more on the individual and changing his/her attitudes, values, and beliefs. The target of the change is the individual. Thus, this set of OD strategies operate at the deepest level of intervention. Laboratory training as typified by T-groups is a representative example of this approach. The technology focuses on helping individuals, through experience in a very unstructured training situation, to become more aware of their own needs and how they affect their interpersonal relationships with others. These OD approaches require expert outside professional consultants to work very closely with the target systems. The current OD program was oriented to reducing this dependency on outside consultants. Also, it was felt that the level of intervention was too deep and the outcomes too uncertain. T-groups have a certain stigma attached to them as being risky and potentially explosive. It was felt that in the current OD program, then, that the laboratory approach was not appropriate to our immediate objective of improving the problem identification and solving capabilities of the teachers.

In summary, it can be seen that the current technology of the OD program is a system-wide approach that focuses on both organizational process and structure. The OD program focuses on process by the use of both survey feedback and training to improve problem identification and solving capabilities of teachers. The OD program also takes an organizational design approach in that a new group, the Program Group, is established in each school with the legitimate task of using the survey feedback for problem identification and solving. The survey-feedback process is thus built into the structure of the organization. This has the potential advantage of sustaining the problem-solving process over time as there is a formal structure to support it.

To expand the training into some of the other areas mentioned above would be, in Huse's typology, to increase the depth of the intervention. Although role negotiation, team building, and greatly increased training in working through interpersonal issues would strengthen the program, another obvious effect would be to increase the cost of the program and to increase the active involvement of external change agents. Nevertheless, it is the opinion of the researchers that the amount of training administered in the current intervention represents the minimum possible and that increased attention to some of these other, more value-laden areas in training would enhance the program. We are not, however, advocating intrapersonal analysis approaches.

This OD Strategy as an Approach to Improving School Effectiveness

This report began by acknowledging that public schools are the object of much criticism for such shortcomings as low productivity, lack of responsiveness to the needs of the students and faculty members, and an inability to serve their communities. The implementation of this OD program has not solved these problems in the experimental district. In fact, as money becomes tighter and students and communities change, the nature of the problems to be solved will change and so will the nature of the solutions that are offered.

What solutions are offered to help cure the "ills" of the public schools depends on what "model" is being applied, what variables are being considered, and what problems are being addressed. For example, desegregation, community involvement, and curriculum reform have all been offered as solutions to the difficulties experienced by urban schools in meeting the needs of low income, minority students. In one case, the focus is on governmental action and regrouping the students; in another, on family interest and influence in the schools; in a third, on fitting the content to the child.

Multiple and sometimes conflicting solutions have been offered to a host of other educational problems such as the crisis of a curtailed money base in times of inflation, the "post-Sputnik" quality of schools crisis, or the "failure" of the schools to prepare students for the world of work. What is perceived as a problem is not always defined by the schools, but the schools are generally the vehicle expected to provide solutions. Changes in curriculum, student composition, class sizes, and technology come and go. But what remains constant is the basic school unit, composed of a group of teachers teaching the currently defined curriculum. These teachers are expected to teach whatever students have been "assigned" to them, within the constraints of the programs and policies that have been "adopted."

A program designed to improve technical core decision making and problem solving does not immediately address any of the problems mentioned above. What it does is to provide the teachers with a collective mechanism to adjust to the changing context and constraints under which they function and to identify ways to affect that context and to better achieve the educational goals in their schools.

One central administrator summed things up, from his point of view, when he said this OD program was capable of solving "little" problems. In schools in general, administrators are increasingly involved with "big" problems--strikes, desegregation orders, adoption of new programs, closing schools because of falling enrollment. Each decision made at that level creates lots of "little" problems at the school level which require adjustment and further change. The teachers need a way not only to affect these "big" decisions, but also to deal with their own local needs in order to continue to carry on and try to improve the education in their schools.

Thus, we do not view the development of organizational problem-solving capacities and the creation of collective decision-making structures as an end in itself. But we do suggest that for some school districts a serious effort to develop the problem-solving capabilities of its own employees might have more effect on the quality of education offered and be a better expenditure of resources than the adoption of yet another new program which may cost a lot of money and yet never achieve acceptance.

The field research reported in this document gives us reason to believe that the basic model which was tested has the potential to increase the efforts of teachers to improve the education in their buildings, particularly if implemented in a district with strong administrative support. Because it involves skills and develops capacities that are "content-free," in that they do not address a particular substantive problem, the program should be especially beneficial during a time of rapid change in schools.

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Appendix A

ORGANIZATION DEVELOPMENT PROGRAM IN SCHOOLS*

by

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THE ORGANIZATIONAL DEVELOPMENT PROGRAM

The Organizational Development Program is a method for diagnosing a wide variety of difficulties in school systems and recommending and implementing remedial action to resolve those difficulties. Key people involved receive special training at Northwestern University in various facets of group problem solving to enhance the effectiveness of the group meetings. This program has been pilot tested with several schools with very favorable results.

The Organizational Development Program that would be implemented in cooperation with staff members incorporates four major components. First, survey data would be collected and returned to school personnel to provide an objective basis for problem and need identification. Second, task-oriented problem solving meetings would be held by the principal group and teacher group for problem analysis and solution generation. Third, "overlapping groups" (teams consisting of administrators, and faculty representatives) and special documents would be used to facilitate the communication and implementation of recommended changes. Fourth, the program would include a self-monitoring feature which would allow each group of teachers and the principal group to evaluate the success of the program. These four items are discussed briefly below.

1. OVERLAPPING GROUPS: Figure 1 describes in diagram form the overlapping structure of the three groups. The program prescribes that all faculty solutions are to be approved by administrators unless principals (or district personnel) have delegated final decision-making authority over specific decisions to the Program Group. Recommendations coming

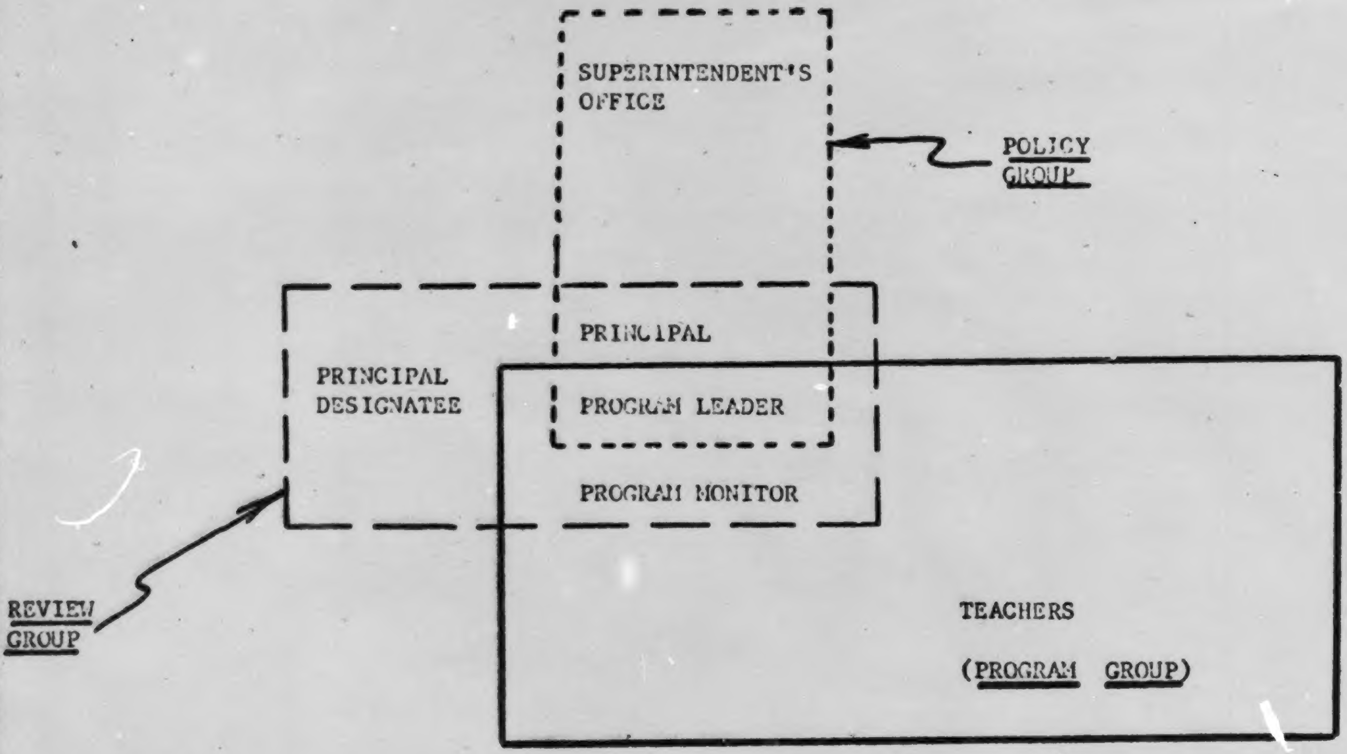

SUPERINTENDENT'S OFFICE
POLICY GROUP
PRINCIPAL
PRINCIPAL DESIGNATEE
PROGRAM LEADER
PROGRAM MONITOR
REVIEW GROUP
TEACHERS
(PROGRAM GROUP)

Figure 1

DIAGRAM SHOWING THE OVERLAPPING OF THE VARIOUS GROUPS from the Program Group are communicated upward to a joint faculty-administration team. This "Review Committee" consists of the principal, the Program Leader, Group Monitor, and another member designated by the principal. Review Committee functions include the sanctioning of Program Group recommendations, explaining why certain proposals cannot be approved, suggesting changes in faculty-initiated solutions, and communicating information upward and downward as necessary. In previous OD programs, we have found that Program Leaders have been able to present the Review Committee members with well thought-out and carefully prepared proposals for solving school problems and meeting organizational needs.

Recommendations which cannot be approved at the Review Committee level--those which have district-wide implications--are sent up a level to "Policy Committee" for consideration. The Policy Committee consists of the superintendent or his appointed representatives who are concerned with the issue at hand. When faculty recommendations cannot be accepted at the Review Committee or Policy Committee levels, committee members are asked to explain why the proposals are unacceptable and how they might be modified to increase their feasibility.

Our previous studies have shown that this overlapping group system promotes the successful implementation of faculty-initiated changes and recommendations. Possibly more importantly, the overlapping groups greatly improved vertical communication in the schools that participated in our earlier program. These favorable results were in part due to the use of the written documents. Also, we would like to note that the overlapping group system was successful in bringing about effective coordination between faculty and administrative decision-making efforts.

The system effectively tapped the decision-making and change management capabilities of administrators at a crucial stage of the decision-making process.

2. FEEDBACK: A specially designed set of questionnaires will be administered to teachers and principals in . Examples of the topic areas, feedback format, and sample questions from the school survey appear as Appendix A. These data are processed at Northwestern University and the information provides a sound basis for each school to identify problems and monitoring them over time to see if they increase or decrease.

3. PROBLEM SOLVING: Elected Program Leaders receive special training for conducting problem-solving sessions and for follow-up techniques once solutions have been generated. They are provided with a set of "ground rules" for guiding the faculty "Program Group" meetings. Program groups are encouraged to generate and analyze a number of good alternatives and to offer these alternatives in the form of positive statements. Strong efforts are made to avoid the attribution of problems to specifically named individuals.

4. SELF MONITORING FEATURE: Each problem-solving group will also elect a project monitor who will be trained at Northwestern in evaluation techniques. This person will give the group the capacity to evaluate its success or lack of success, and the reasons for it. This person will also be a member of the Review Group.

Benefits of the Study

Pilot testing of this program and the experience of other persons with various components of the program (e.g., survey feedback) have identified many possible benefits. We must stress, however, that schools and school districts vary and that the program is more of an experiment than the implementation of a thoroughly tested approach. (It is precisely because the benefits are potentially very numerous and because more testing is necessary that the National Institute of Education has provided the funds for the project). Some of the benefits could experience which were found in the schools that participated in the pilot program include:

1. Greater communication and improved relations among teachers and between teachers and principals and various other administrative parts of the school system;
2. A more accurate understanding of problems or difficulties;
3. More implementation or follow through on recommendations;
4. Better solutions to problems;
5. Increased control by principals and teachers over problems; and
6. The functioning of other committees may also be improved.

Notice that this program is not just a problem identification program. The quality of problem identification is enhanced by the survey data which are collected and feedback. However, the program stresses the processes and structure and skill necessary to implement solutions through the various levels in the entire district. There is thus heavy emphasis placed on getting teachers, principals and staff from the superintendent's office working together to deal with solutions to ussues affecting the district rather than just identifying problems. Implementation and follow through are thus major components of this program that differentiate it from traditional organizational development programs.

Limitations

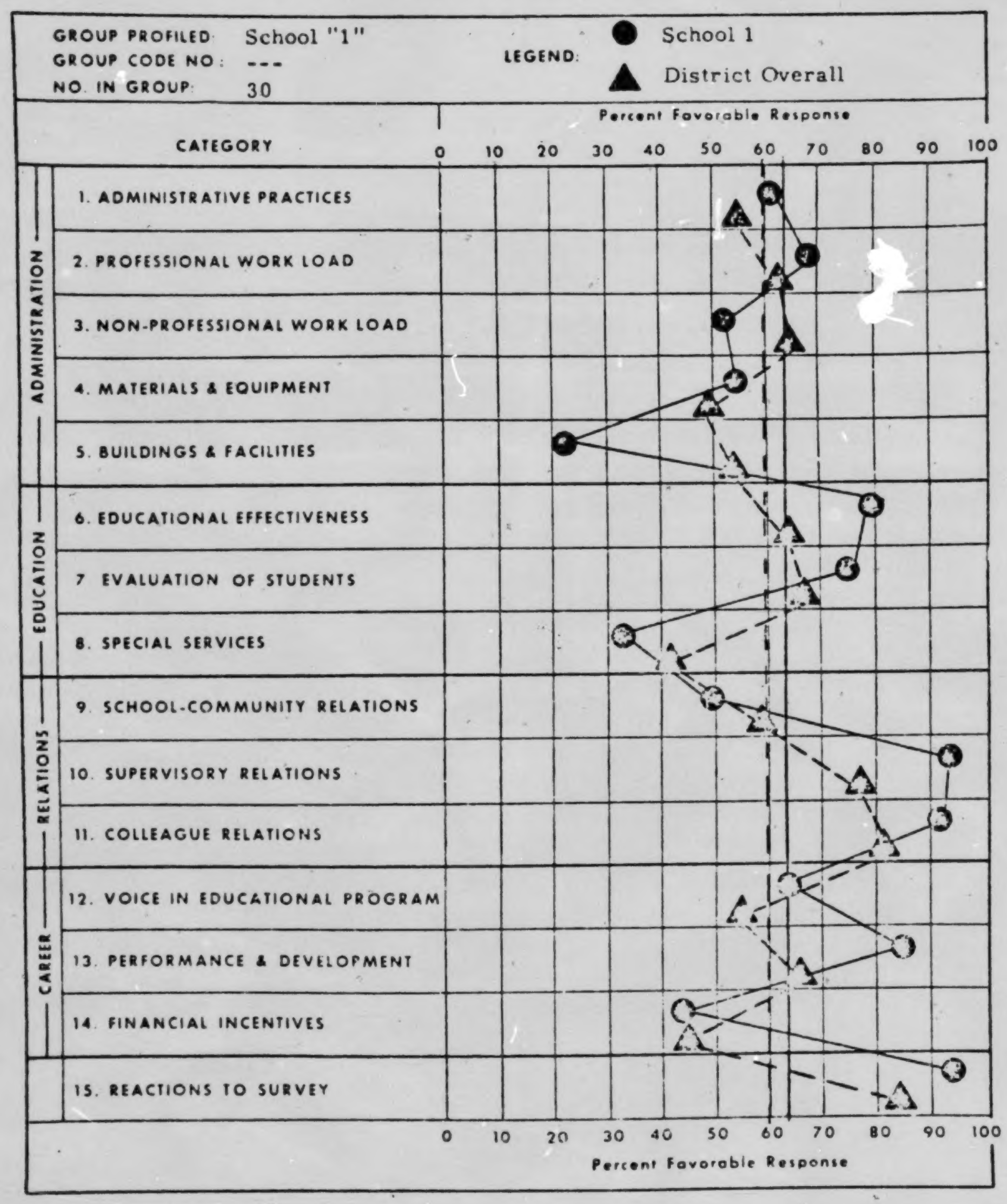
The proposed study is not without its limitations. It is unlikely that all the difficulties would be experienced, but it is also unlikely that no problems will be expterienced. The possible limitations are:

1. Teacher time will be required, some of which could come after normal school hours. The district will provide some time for teacher participation. Of course, the frequency and direction of meetings is completely up to the group. The grant provides money for substitutes for those program leaders who attend the two-day training program at Northwestern.
2. Initially, some persons may feel a lack of control over problem solving, although this feeling usually disappears within several weeks.
3. Unrealistic expectations might arise as to what the approach can do.
4. Some questionnaires must be filled out.

TOPIC AREAS FOR SURVEY FEEDBACK

(SAMPLE)

SCHOOL SURVEY - Summary Profile



GROUP PROFILED: School "1"
GROUP CODE NO.: ---
NO. IN GROUP: 30

SAMPLE QUESTIONS FROM SCHOOL SURVEY

SS I ADMINISTRATIVE PRACTICES

_____ 1. In so far as they affect me, the decisions made by the central office administration are fair and equitable.

_____ 2. District administrators seem to take teachers' viewpoints into account when making decisions affecting the teaching staff.

SS II PROFESSIONAL WORK LOAD

_____ 1. The number of students I have to work with makes it difficult for me to do a good job.

_____ 2. My professional work load is fair and reasonable.

_____ 3. I have ample opportunity to deal with the individual differences of my students.

SS IX SCHOOL - COMMUNITY RELATIONS

_____ 1. Parent organizations exert too great an influence on educational matters of this school.

_____ 2. Our school district has good working relationships with other appropriate agencies in the community (e.g., park district, police, community services).

_____ 3. Teachers are sufficiently aware of community resources which are available to help students with special needs.

SS VIII SPECIAL SERVICES

_____ 1. Teachers receive adequate assistance in improving their teaching methods.

_____ 2. Effective curriculum assistance is provided classroom teachers in this school.

3. This school system effectively provides for the needs of the following types of exceptional students:

_____ a. slow learners

_____ b. gifted students

_____ c. physically handicapped students

SS XIV STUDENTS

_____ 1. Solicitation of student opinion on certain matters is inadequate.

_____ 2. We have clear-cut instructional objectives in this school.

_____ 3. We should re-examine our tracking and ability-grouping policies.

Appendix B

SHORT DESCRIPTION
October 14, 1974

ORGANIZATION DEVELOPMENT
PROGRAM IN SCHOOLS*

by

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* Funded by the National Institute of Education, Department of Health, Education and Welfare

OVERVIEW OF THE ORGANIZATION DEVELOPMENT PROGRAM

prepared for the

School District

The National Institute of Education has recently funded our research program on the further refinement of an organization development program for school systems. The purpose of this memorandum is to provide the members of the School District with an overview of the proposed program. Though participation in this program on the part of district administrators and teachers would be voluntary, we hope to obtain total district involvement. The objective of the proposed OD program is to bring about organizational improvements by means of a "task-oriented" and "structural" approach. This OD strategy is designed to provide faculty members and principals with structured opportunities for identifying school and district problems, generating solutions to problems and needs, and initiating changes. The program neither involves "person-centered" change strategies (sensitivity training) nor "hard technological" methods (operations research). Instead, this OD program is concerned with: analyzing task problems rather than appraising people; the jobs to be done rather than the personalities of the people performing the jobs; work progress and problems rather than individual or group inter-personal strengths and weaknesses.

THE ORGANIZATION DEVELOPMENT PROGRAM

The organization development program that would be implemented in cooperation with staff members incorporates four major components. First, survey data would be collected and returned to school personnel to provide an objective basis for problem and need identification. Second, task-oriented problem solving meetings would be held by principals and teachers for problem analysis and solution generation. Third, "overlapping groups" (teams consisting of administrators and faculty representatives) and special documents would be used to facilitate the communication, sanctioning, and implementation of recommended changes. Fourth, the program would include a self-monitoring feature which would allow each group of teachers and the principal group to evaluate the success of the program.

FEEDBACK: The first component, survey feedback, has frequently been used as a foundation for OD programs in governmental agencies, businesses, and schools. The procedures for survey feedback built into this program are designed to maximize the relevance and usefulness of the data. Data on work attitudes would be collected from faculty members and principals through the use of the *School Survey* and the *Principal Survey*. These questionnaires have been specifically constructed for organization development programs of this type. Questionnaire items focus on such issues as: task relations between school and district personnel; special services;

professional and non-professional work loads; materials and equipment; student evaluation procedures; student needs; etc.. (We are currently modifying these surveys and faculty and administrative representatives could join us to make the revised questionnaires particularly relevant to the schools.) By collecting and analyzing the survey data, principals and teachers can specify existing work problems and can begin to deal with these issues.

The OD program calls for self-assessment and improvement rather than evaluation by others. The results of the surveys are for the use of those school personnel who provided the data. The principal and staff of each school receive data on their own school profiled against overall district results. (Principals in the district can exchange data by mutual consent.) Though the research team will assign identification numbers to the questionnaires, we will preserve the anonymity of individual respondents and each school at all times.

The OD program is designed to bring about the effective utilization of the survey data. Faculty Program Leaders, elected by their fellow teachers in each building, are provided a short training course on survey feedback procedures. The Program Leaders would conduct building level feedback sessions in an effort to specify mutual work problems, identify the underlying reasons and causes of problems and needs, and develop change goals. The feedback meetings are to be conducted in a somewhat impersonal manner with the emphasis placed on work roles and inter-role relations.

PROBLEM SOLVING: The elected faculty Program Leaders would also conduct problem solving sessions in each school. Program Leaders receive training in problem solving and communication skills to ensure that faculty meetings will be productive and that the teachers' time will be well spent. Program Leaders are provided with a set of "ground rules" for guiding the faculty "Program Group" meetings. The ground rules are designed to effect creative problem solving, to retain a task-orientation, and to provide an ongoing framework for faculty decision making processes. For example, attempts would be made to have all group members contribute to the discussions, to avoid conformity effects, and to defer solution generation until various interpretations of the problems have been explored. Group members are encouraged to use job titles or organizational functions to be performed rather than names of individuals. Problems are to be worded and suggestions offered in the form of positive statements. Program Groups are encouraged to generate and analyze a number of good alternatives before a final solution is selected. Past research has shown that a skilled Program Leader, applying these and other problem solving guidelines, can direct the faculty peer group in producing high quality solutions.

To formalize Program Group activities, a timetable is developed for the action initiated for each issue, including starting dates, interim progress reports, and completion dates. Minutes are kept by the Program Group Monitor--a teacher elected by the faculty members. Special forms are provided for the minutes in which Problems, Underlying Reasons and Causes, and Actions to Take are recorded. Program Group members are invited to review the minutes to determine whether they accurately reflect the group's thinking.

OVERLAPPING GROUPS: The program prescribes that all faculty solutions are to be approved by administrators unless principals (or district personnel) have delegated final decision making authority over specific decisions to the Program Group. Recommendations coming from the Program Group are communicated upward to a joint faculty-administration team. This "Review Committee" consists of the principal, the Program Leader, Group Monitor, and another member designated by the principal. Review Committee functions include the sanctioning of Program Group recommendations, explaining why certain proposals cannot be approved, suggesting changes in faculty-initiated solutions, and communicating information upward and downward as necessary. In previous OD programs, we have found that Program Leaders have been able to present the Review Committee members with well thought-out and carefully prepared proposals for solving school problems and meeting organizational needs.

Recommendations which cannot be approved at the Review Committee level--those which have district-wide implications--are sent up to a district level "Policy Committee" for consideration. The Policy Committee consists of the superintendent or his appointed representative, and the building principals, Program Leaders, and Group Monitors who are concerned with the issue at hand. When faculty recommendations cannot be accepted at the Review Committee or Policy Committee levels, committee members are asked to explain why the proposals are unacceptable and how they might be modified to increase their feasibility.

Our previous studies have shown that this overlapping group system promotes the successful implementation of faculty-initiated changes and recommendations. Possibly more importantly, the overlapping groups greatly improved vertical communication in the schools that participated in our earlier program. These favorable results were in part due to the use of the written documents and minutes maintained by the Group Monitors. Also, we would like to note that the overlapping group system was successful in bringing about effective coordination between faculty and administrative decision making efforts. The system effectively tapped the decision making and change management capabilities of administrators at a crucial stage of the decision making process.

GROUP MONITORING and OTHER PROGRAM COMPONENTS: The OD program provides for the continuing assessment of program activities. The elected Group Monitor from each school will be provided with a short training experience on the evaluation of OD processes. Program Group Monitors will periodically interview faculty members and the principal to determine how well the program is progressing. This information will be communicated to the Program Leader--so that necessary adjustments can be made in each school--and to the research team--so that any general OD problems can be identified and corrected. The research team plans to administer another survey to assess certain conditions in the participating schools.

This information will remain completely confidential but will be reported back to the individual schools, upon request, at the end of the research period.

The project also provides for a Principal Problem Solving Group. The Principal Group would receive data on the attitudes of both teachers and principals. We expect that the Principal Group, which would operate in a manner similar to the Faculty Program Group, will focus on those changes having district-wide implications. The OD guidelines also suggest that the faculty Program Leaders meet occassionally to discuss district-wide issues and to exchange ideas on group leadership.

THE COSTS AND BENEFITS OF THE PROGRAM

The research grant from the National Institute of Education provides funds to cover many of the monetary expenses commonly incurred in the course of OD programs. The major cost of this program to the School District is the time that would be expended by faculty members and administrators.

We would like the participating school district to make at least a one year commitment to this project. We feel that this is the minimum amount of time needed for a district to realize the potential benefits of the OD program. The number of man-hours expended during this period is flexible and can vary from school to school. However, we have found that there is a direct relationship between time spent on program activities and benefits accrued.

The start-up costs of the program primarily involve time spent for training. Program Leaders would be asked to attend a three day leadership course at Northwestern University (Evanston campus). The National Institute of Education has provided released time pay for Program Leaders and sufficient funds to cover training expenses. We would also like the Program Group Monitors to attend a one day course on evaluation procedures at Northwestern. These expenses would also be covered by NIE. Principal training would consume at least one or possibly two days. This training could be conducted at a time that is most convenient for the principals. (The Federal grant does not provide released time for the principals.) At the time of program initiation, principals and Program Leaders might want to spend some time on developing items for the questionnaires.

Survey feedback and problem solving meetings comprise the major time commitment. To ensure that the program is initiated successfully, we recommend that the district provides three meeting periods (two to four hours each) for the faculty Program Group. In-service days could possibly be set aside for this purpose. After this initial set of meetings, it is suggested that the faculty members hold problem solving sessions approximately once a month. In our previous program, the frequency of Program Group meetings varied from school to school. Some of the faculty groups elected to meet as frequently as once a week--we left this decision up to the teachers in each building. In some districts, time was provided for faculty meetings; in other districts, the teachers met on their own time. "Growth credits" were granted to teachers who participated in this program in certain schools.

The Review Committee should meet after the second and third faculty Program Group meetings and as necessary thereafter. We would like the principals to commit themselves to three meetings. One of these sessions should be held at an early stage of the program. Program Group Leaders are encouraged to meet as a team after they have held their third problem solving sessions in their respective schools. Somewhat heavy time demands are placed on the Program Group Leaders. If possible, the faculty leaders might be compensated by reductions in their extra-curricular work assignments or non-professional duties.

Our previous research, sponsored by the U.S. Office of Education, was designed to assess the benefits of this type of OD program in school buildings. The effectiveness of the earlier program was determined on the basis of interviews with principals and Program Leaders and questionnaires administered to the faculty members. The program made its greatest impact by improving communication within the schools. In the opinion of teachers and principals, the project improved faculty morale, cohesiveness, and problem solving capabilities. Our statistical results show that teachers' attitudes toward their work environment improved significantly. The greatest improvements were found in teachers' attitudes toward (1) performance and development (their opportunities for professional growth); (2) their voice in the educational program of their schools; and (3) their relations with their principals. The program also resulted in improved teacher attitudes toward the educational effectiveness of their schools, the procedures used for evaluating students, and school-community relations. The program did not have a very great effect on teachers' attitudes toward such things as buildings and facilities.

The OD program was very successful in improving the problem solving and change capabilities of the participating schools. Faculty-initiated changes occurred in most of the schools involved in the previous program. Examples of such changes include: a teacher appraisal and evaluation program was developed and implemented; a teacher-administration committee developed and monitored a modular scheduling system; teachers assumed responsibility for making assignments regarding playground, lunch, bus duty, etc.; student evaluation procedures were improved; parent-teacher conferences were restructured and extended; etc.. According to principals and Program Leaders, the program also facilitated the implementation of administratively-initiated changes; for example, individualized instruction was implemented more easily as a result of the OD program.

While the program had numerous functional consequences, it was not without its weaknesses. For example, principals felt that they needed more preparation for the OD program. In view of this, we decided to conduct the formal principal training sessions.

Though the previous program stimulated change, it did not prompt the early adoption of educational innovations to a great extent. In an effort to stimulate innovativeness, we would assist selected schools in linking up with outside experts who could provide technical, up-to-date assistance in solving faculty-identified problems. Also, certain educational problems go beyond the school and demand coordination with other community agencies. We are prepared to provide principals and program Leaders with procedures for resolving inter-organizational problems. We feel that improvements such as these will make this revised OD project even more successful than the previous program. In conclusion, we are prepared to ensure that the OD program is implemented successfully and are looking forward to working with the   schools on this NIE study.

THE RESEARCH TEAM

The research team coordinating this program is made up of faculty members from Northwestern University and the University of Michigan. The three "principle investigators" specialize in organization theory, the organization behavior of education systems, and the behavioral sciences & marketing. All three investigators have been active in the areas of educational research, organization development, and innovation in education. Two of the investigators collaborated on a book *Innovations and Organizations*. The third investigator is currently working on another NIE project on community colleges. As a group, the research team organized an American Educational Research Association symposium on "Change Processes in Education" and have presented a number of papers on that topic. The trainers are experts in the fields of speech, communications, and problem solving. They have conducted numerous training programs and collaborated with us on our previous OD program for schools. Our graduate research assistants have had extensive experience with this organization development strategy and have worked with us on previous projects. The research assistants have held various positions in school systems--teacher, assistant principal, department chairman--and are well prepared to work with school personnel.

Appendix C
ELEMENTARY SCHOOL
FEEDBACK SURVEY

This questionnaire is part of The Organization Development Program which is currently being conducted in the School System. The purpose of this survey is to collect data from the teachers in your school concerning your attitudes toward the district and your own school. The information collected by means of this survey will be returned to your teacher group to provide the basis for problem-solving and change initiation. Even if your school is not participating in the program, the results of this survey will be made available to you.

The survey consists of a number of statements concerning your attitudes and opinions about various aspects of your work situation. Please read each statement carefully and decide how you feel about it. You might agree with some statements and disagree with others; and you may be undecided about some. In the boxes to the right of each statement, please mark the box which corresponds to your response.

The response code is as follows:

SA (Strongly Agree)	A (Agree)	U (Undecided)	D (Disagree)	SD (Strongly Disagree)	NA (Not Applicable)
☐	☐	☐	☐	☐	☐

Mark the "Not Applicable" box only if a statement is not applicable in your school or does not make sense.

Work rapidly, but please respond to each statement. Do not spend too much time on any one statement. Some of the statements might not be worded exactly as you would like them to be; however, answer them as best you can. If you would like to make a short comment regarding a particular statement, place a circle around your response and write your comment under the statement. Brief comments will be summarized and included as part of the feedback report to your teacher group.

We request that you complete the Demographic Data section which appears on the last two pages. We need this information for project evaluation purposes. Please be advised that all of your responses will be treated with the strictest confidentiality and that no one in your district will have access to any information provided by any individual teacher. All data will be summarized in statistical form by computer and the data to be returned to your school will be based on the responses of the entire teacher group.

We appreciate your cooperation and hope that you find the questionnaire interesting and thought-provoking.

1/20/75

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
1. (*1-7)	My recommendations about the placement of students into different instruction levels, special programs, etc., are usually followed............	☐	☐	☐	☐	☐	☐
2.	Little effort is made here to evaluate the effectiveness of our instructional program.........	☐	☐	☐	☐	☐	☐
3.	Teachers in this school have insufficient time to consult with each other about problems they are having................................	☐	☐	☐	☐	☐	☐
4.	Most of the students I work with are placed at the instructional level that is best for them..	☐	☐	☐	☐	☐	☐
5.	We sometimes discipline students for the wrong reasons in this school.........................	☐	☐	☐	☐	☐	☐
6. (1-12)	District administrators seem to take teachers' viewpoints into account when making decisions affecting the teaching staff....................	☐	☐	☐	☐	☐	☐
7.	I have opportunity during the school day to:						
	a. grade papers................................	☐	☐	☐	☐	☐	☐
	b. meet with students.........................	☐	☐	☐	☐	☐	☐
	c. meet with parents..........................	☐	☐	☐	☐	☐	☐
	d. reflect on my teaching and plan ahead........	☐	☐	☐	☐	☐	☐
8. (1-17)	I am required to perform too many non-professional duties here (playground, hall, stairs, lunchroom, and study hall duties)...............	☐	☐	☐	☐	☐	☐
9.	I am unable to make full use of the facilities, materials, and equipment provided for teachers at this school................................	☐	☐	☐	☐	☐	☐
10.	The students coming into my classes are academically well prepared............................	☐	☐	☐	☐	☐	☐
11.	The following specialized programs here need to be greatly improved:						
	a. music......................................	☐	☐	☐	☐	☐	☐
	b. art..	☐	☐	☐	☐	☐	☐
(1-22)	c. drama......................................	☐	☐	☐	☐	☐	☐
(1-23)	d. physical education.........................	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
(1-24)	12. Parent organizations exert too great an influence on educational matters of this school...........	☐	☐	☐	☐	☐	☐
	13. My principal seldom tries to get my ideas about things....................................	☐	☐	☐	☐	☐	☐
	14. Teachers in this school are open to professional assistance from one another.....................	☐	☐	☐	☐	☐	☐
	15. Interruptions (messages, monitors, intercom bulletins) are kept to a minimum around here.....	☐	☐	☐	☐	☐	☐
	16. Teachers in this district have enough autonomy to perform their roles in a flexible manner......	☐	☐	☐	☐	☐	☐
(1-29)	17. The superintendent and his assistants seem to show a real interest in obtaining our ideas and suggestions................................	☐	☐	☐	☐	☐	☐
	18. I think my work performance is judged fairly here..	☐	☐	☐	☐	☐	☐
	19. We should re-examine our tracking and ability-grouping policies...............................	☐	☐	☐	☐	☐	☐
	20. The quality of the following textbooks available to my students is substandard:						
	a. math..	☐	☐	☐	☐	☐	☐
	b. English.....................................	☐	☐	☐	☐	☐	☐
(1-34)	c. social studies..............................	☐	☐	☐	☐	☐	☐
	d. science.....................................	☐	☐	☐	☐	☐	☐
	e. reading.....................................	☐	☐	☐	☐	☐	☐
	f. health......................................	☐	☐	☐	☐	☐	☐
	21. This district too strongly emphasizes "professional development," graduate study, attending conferences, etc...............................	☐	☐	☐	☐	☐	☐
(1-39)	22. Our student achievement and aptitude testing programs are insensitive to the cultural differences among our students.....................	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
23. (1-40)	In my opinion, adequate educational standards are being upheld in this school.................	☐	☐	☐	☐	☐	☐
24.	There are adequate space and equipment for carrying out my work -- including desk space, drawers, bookshelves, and the like......................	☐	☐	☐	☐	☐	☐
25.	I am held accountable for things I have little control over..................................	☐	☐	☐	☐	☐	☐
26.	The arrangements this school makes for movement of students (e.g., between classes, to assemblies, to lunch) are often a cause of discipline problems.....................................	☐	☐	☐	☐	☐	☐
27.	The layout of this school is inconvenient for the staff.....................................	☐	☐	☐	☐	☐	☐
28. (1-45)	The quality of supplementary materials for student use here needs to be greatly improved...........	☐	☐	☐	☐	☐	☐
29.	The grading procedures available to teachers are satisfactory.................................	☐	☐	☐	☐	☐	☐
30.	The following specialized services generally meet the needs of our students:						
	a. EMH..	☐	☐	☐	☐	☐	☐
	b. speech therapy..............................	☐	☐	☐	☐	☐	☐
	c. guidance counseling.........................	☐	☐	☐	☐	☐	☐
(1-50)	d. social work.................................	☐	☐	☐	☐	☐	☐
	e. psychological services......................	☐	☐	☐	☐	☐	☐
	f. learning disabilities.......................	☐	☐	☐	☐	☐	☐
31.	Certain community groups exert too much influence on the professional work of this school..........	☐	☐	☐	☐	☐	☐
32.	Some of the faculty in this school think they run the place.................................	☐	☐	☐	☐	☐	☐
33. (1-55)	This district's in-service educational program helps me improve my professional skills..........	☐	☐	☐	☐	☐	☐
34. (1-56)	We have clear-cut instructional objectives in this school...................................	☐	☐	☐	☐	☐	☐

			(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
	35.	The work of the following staff specialists in this district is well coordinated with the work of the classroom teachers						
(1-57)	a.	guidance counselors......................	☐	☐	☐	☐	☐	☐
	b.	librarians...............................	☐	☐	☐	☐	☐	☐
	c.	social workers...........................	☐	☐	☐	☐	☐	☐
	d.	nurses...................................	☐	☐	☐	☐	☐	☐
	e.	school psychologist......................	☐	☐	☐	☐	☐	☐
(1-62)	f.	curriculum specialists...................	☐	☐	☐	☐	☐	☐
	g.	learning disabilities specialist..........	☐	☐	☐	☐	☐	☐
	h.	speech specialist........................	☐	☐	☐	☐	☐	☐
	i.	reading specialist.......................	☐	☐	☐	☐	☐	☐
	j.	bi-lingual instructors...................	☐	☐	☐	☐	☐	☐
(1-67)	l.	hearing disability specialist.............	☐	☐	☐	☐	☐	☐
	36.	In so far as they affect me, the decisions made by the central office administration are fair and equitable...........................	☐	☐	☐	☐	☐	☐
	37.	My work here provides me with ample opportunity for personal growth and development............	☐	☐	☐	☐	☐	☐
	38.	Teachers have adequate input in determining the qualifications and hiring of new faculty members..	☐	☐	☐	☐	☐	☐
	39.	My principal is fair in his/her dealings with me..	☐	☐	☐	☐	☐	☐
(1-72)	40.	This school is not performing to its potential.	☐	☐	☐	☐	☐	☐
	41.	The building and grounds where I work are kept as clean and attractive as possible...........	☐	☐	☐	☐	☐	☐
	42.	I receive sufficient clerical assistance to do my job effectively..........................	☐	☐	☐	☐	☐	☐
	43.	People in this school provide one another with great support and encouragement...............	☐	☐	☐	☐	☐	☐
(1-76)	44.	I have adequate opportunity to express my viewpoints about the philosophy and goals of this school..................................	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
45. (1-77)	I would prefer a different work assignment (grade level, subject matter, etc.) from the one I now have	☐	☐	☐	☐	☐	☐
46.	People in this community appear to be "education oriented"	☐	☐	☐	☐	☐	☐
47. (*2-7)	My principal has sufficient influence with the district office	☐	☐	☐	☐	☐	☐
48.	The poor work performance of some people in this school staff makes it difficult for the school to achieve adequate instructional goals	☐	☐	☐	☐	☐	☐
49.	The use of instructional equipment is well coordinated within my school	☐	☐	☐	☐	☐	☐
50.	We lack satisfactory procedures in this district for evaluating student progress (e.g., achievement tests)	☐	☐	☐	☐	☐	☐
51. (2-11)	We are seldom kept informed about what the school board and top administration are thinking	☐	☐	☐	☐	☐	☐
52.	Solicitation of community opinions on certain matters is inadequate	☐	☐	☐	☐	☐	☐
53.	Teachers receive adequate assistance in improving their teaching methods	☐	☐	☐	☐	☐	☐
54.	The experienced teachers here do all they can to help new faculty members	☐	☐	☐	☐	☐	☐
55.	Procedures for handling new students are satisfactory	☐	☐	☐	☐	☐	☐
56. (2-16)	Some people in this school system are too concerned with reputation, public relations, and making this district a "show case"	☐	☐	☐	☐	☐	☐
57.	A proper amount of paraprofessional assistance as available to the teachers in this school	☐	☐	☐	☐	☐	☐
58. (2-18)	Our school district has good working relationships with other appropriate agencies in the community (e.g., part district, police, community services)	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
60. (2-19)	My principal fails to serve as a communication link between the teachers and the district administration and school board................	☐	☐	☐	☐	☐	☐
61.	Teachers in this district are not involved enough in resolving school-related problems with community agencies and organizations......	☐	☐	☐	☐	☐	☐
62.	I am required to do too much administrative paper work (attendance reports, tardy slips, statistical reports, etc.)....................	☐	☐	☐	☐	☐	☐
63.	The general physical conditions of my work place(lighting, temperature, ventilation, etc.) hamper me in doing a good job..................	☐	☐	☐	☐	☐	☐
64.	Solicitation of student opinion on certain matters is inadequate.........................	☐	☐	☐	☐	☐	☐
65. -24)	It is easy and convenient to get teaching aids and equipment into the classroom here.....	☐	☐	☐	☐	☐	☐
66.	Insufficient attention is directed toward developing the basic reading and writing skills of our students.........................	☐	☐	☐	☐	☐	☐
67.	The student records maintained in this district are concise and comprehensive..................	☐	☐	☐	☐	☐	☐
68.	This school system effectively provides for the needs of the following types of exceptional students:						
	a. slow learners..............................	☐	☐	☐	☐	☐	☐
	b. gifted students...........................	☐	☐	☐	☐	☐	☐
(2-29)	c. physically handicapped students............	☐	☐	☐	☐	☐	☐
	d. students who speak a language other than English..	☐	☐	☐	☐	☐	☐
69.	Community groups make good use of school facilities....................................	☐	☐	☐	☐	☐	☐
70.	My principal usually "goes to bat" for us with his/her superiors...........................	☐	☐	☐	☐	☐	☐
71.	Teachers and other professional personnel in this school freely share ideas and materials...	☐	☐	☐	☐	☐	☐
72. (2-34)	It is easy to appeal decisions made in the district which affect me adversely.............	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
73. (2-35)	A teacher in this school can develop a sense of professional competence.....................	☐	☐	☐	☐	☐	☐
74.	In my opinion, my students show normal consideration, courtesy, and respect............	☐	☐	☐	☐	☐	☐
75.	I seldom get the help I need in handling difficult discipline cases........................	☐	☐	☐	☐	☐	☐
76.	I am asked to read too many communications from "higher-ups" in this school system............	☐	☐	☐	☐	☐	☐
77.	The orientation procedures for new teachers in this school are satisfactory...............	☐	☐	☐	☐	☐	☐
78. (2-40)	I am kept well informed concerning available instructional resources.......................	☐	☐	☐	☐	☐	☐
79.	The policy in this school concerning discussion of controversial matters with students should be reevaluated.................................	☐	☐	☐	☐	☐	☐
80.	Our students are put under too much pressure to do well or to cover too much material.......	☐	☐	☐	☐	☐	☐
81.	It is difficult to initiate the purchase of materials and equipment which I feel I need for teaching.................................	☐	☐	☐	☐	☐	☐
82.	Teachers in this school are geuninely interested in helping each other with teaching problems...	☐	☐	☐	☐	☐	☐
83. (2-45)	The educational program of this school is sufficiently demanding of students...............	☐	☐	☐	☐	☐	☐
84.	District administrators fail to concern themselves with important educational matters faced by the faculty..........................	☐	☐	☐	☐	☐	☐
85.	In general, the parents of the students here are interested in helping us educate their children...	☐	☐	☐	☐	☐	☐
86.	A student here sometimes has to do without needed supplementary materials.................	☐	☐	☐	☐	☐	☐
87.	Outstanding work by faculty members in this school is adequately rewarded.................	☐	☐	☐	☐	☐	☐
88. (2-50)	Going through "the proper channels" is stressed too much in this district.....................	☐	☐	☐	☐	☐	☐
89. (2-51)	I am provided with useful information through our student aptitude and achievement testing programs.....................................	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
90. (2-52)	Many people here are more concerned with their own personal interests than with the over-all welfare of the school................	☐	☐	☐	☐	☐	☐
91.	We receive effective assistance in diagnosing the learning difficulties of individual pupils.	☐	☐	☐	☐	☐	☐
92.	I approve of the classroom disciplinary policies which are practiced in this district......	☐	☐	☐	☐	☐	☐
93.	Our students are offered worthwhile extracurricular activities.........................	☐	☐	☐	☐	☐	☐
94.	I have ample opportunity to deal with the individual differences of my students..........	☐	☐	☐	☐	☐	☐
95. (2-57)	We have adequate facilities in which students can work individually or in groups............	☐	☐	☐	☐	☐	☐
6.	My principal seems to take suggestions for improvement as a personal criticism...........	☐	☐	☐	☐	☐	☐
97.	The number of students I have to work with makes it difficult for me to do a good job.....	☐	☐	☐	☐	☐	☐
98.	Too many students here seem to be more interested in getting grades than in learning.......	☐	☐	☐	☐	☐	☐
99.	My professional work load is fair and reasonable.	☐	☐	☐	☐	☐	☐
100. (2-62)	Physical facilities for our personal use (lounge, washroom, etc.) need to greatly improved....................................	☐	☐	☐	☐	☐	☐
101.	My principal has an unrealistic view of what goes on in my work situation..................	☐	☐	☐	☐	☐	☐
102.	Student absences are excessive in this school...	☐	☐	☐	☐	☐	☐
103.	The classrooms, offices, and other work areas here need considerable improvement............	☐	☐	☐	☐	☐	☐
104.	I am asked to spend too much time in meetings...	☐	☐	☐	☐	☐	☐
105. (2-67)	Teachers receive administrative support in arranging new learning experiences for their students....................................	☐	☐	☐	☐	☐	☐
106. (2-68)	Our principal sometimes fails to concern himself/herself with important educational matters faced by the faculty..................	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
107. (2-69)	Students have proper access to buildings and grounds......................................	☐	☐	☐	☐	☐	☐
108.	People in this school cooperate well...........	☐	☐	☐	☐	☐	☐
109.	I am seldom encouraged to attend outside professional conferences and workshops.........	☐	☐	☐	☐	☐	☐
110.	Most of the meetings I am required to attend here are worthwhile..........................	☐	☐	☐	☐	☐	☐
111.	The instructional materials provided for my use here are very satisfactory.................	☐	☐	☐	☐	☐	☐
112. (2-74)	My principal seldom shows initiative in seeking ways to help us in our work....................	☐	☐	☐	☐	☐	☐
113.	I'm rarely told whether or not I'm doing good work....................................	☐	☐	☐	☐	☐	☐
114.	Adequate facilities are available for my use during off-periods for grading papers, meeting with students and parents, and the like........	☐	☐	☐	☐	☐	☐
115.	Our committee efforts and reports are frequently ignored.......................................	☐	☐	☐	☐	☐	☐
116.	Teachers in this school keep the principal well informed about classroom and teaching problems.	☐	☐	☐	☐	☐	☐
117. (*3-7)	The budgetary procedures are too rigid to permit special expenditures at the time they are needed.....................................	☐	☐	☐	☐	☐	☐
118.	The scheduling of students and classes in this school is too inflexible......................	☐	☐	☐	☐	☐	☐
119.	I have sufficient supplies for my work..........	☐	☐	☐	☐	☐	☐
120.	The physical layout of this school sometimes causes problems for the students...............	☐	☐	☐	☐	☐	☐
121.	Our instructional program enables students to work at the pace that is best for them.........	☐	☐	☐	☐	☐	☐
122. (3-12)	The results of our student evaluation procedures do not constructively influence the educational programs of this school.......................	☐	☐	☐	☐	☐	☐
123.	This school does a good job of preparing students to be responsible citizens............	☐	☐	☐	☐	☐	☐
124.	Effective remedial help is available to any of my students who need it.......................	☐	☐	☐	☐	☐	☐
125. (3-15)	Relations between the parents of students and the staff of this school need to be improved....	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
126. (3-16)	This district has not given sufficient consideration to the problems posed by socioeconomic differences among students...........	☐	☐	☐	☐	☐	☐
127.	In general, I approve of school board policies.	☐	☐	☐	☐	☐	☐
128.	Our school has an excellent instructional resource center for meeting student needs......	☐	☐	☐	☐	☐	☐
129.	This school lacks an "atmosphere of learning"...	☐	☐	☐	☐	☐	☐
130.	Generally speaking, I feel I could do far better work with students different from those usually assigned to me........................	☐	☐	☐	☐	☐	☐
131. (3-21)	So far as I am concerned, extracurricular duties (sponsoring student clubs and activities, etc.) are distributed fairly here..............	☐	☐	☐	☐	☐	☐
132.	Teachers are sufficiently aware of community resources which are available to help students with special needs..........................	☐	☐	☐	☐	☐	☐
133.	My principal backs me up in my dealings with parents....................................	☐	☐	☐	☐	☐	☐
134.	The procedures for judging my performance are helpful to me in improving my work............	☐	☐	☐	☐	☐	☐
135.	The students I work with present an unusual amount of discipline problems.................	☐	☐	☐	☐	☐	☐
136. (3-26)	In my opinion, the right teachers are appointed to positions of special responsibility (e.g., department heads, committee chairman, etc.)....	☐	☐	☐	☐	☐	☐
137.	This school board seems more concerned about keeping costs down than about building an effective educational program..................	☐	☐	☐	☐	☐	☐
138.	Our resource room/school library and reference materials are adequate to meet instructional needs.....................................	☐	☐	☐	☐	☐	☐
139.	Effective curriculum assistance is provided classroom teachers in this school.............	☐	☐	☐	☐	☐	☐
140.	The administration usually tries to take action on faculty complaints..................	☐	☐	☐	☐	☐	☐
141. (3-31)	There are many cliques or groups in this school that create a nonprofessional atmosphere.......	☐	☐	☐	☐	☐	☐
142. (3-32)	There is little opportunity for me to take part in the development of the curriculum of this school..................................	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
143. (3-33)	This school assumes too many educational responsibilities that properly belong in the home or to other community agencies	☐	☐	☐	☐	☐	☐
144.	Men and women in this district have equal opportunities for promotion and advancement	☐	☐	☐	☐	☐	☐
145.	Most of the time it's safe to say what you think around here concerning school matters	☐	☐	☐	☐	☐	☐
146.	Teachers in this district have the proper amount of access to representatives of firms selling educational materials (e.g., texts, audi-visual equipment, etc.)	☐	☐	☐	☐	☐	☐
147.	There is a spirit of willingness to experiment with new curriculum ideas in this school	☐	☐	☐	☐	☐	☐
148. (3-38)	I'm essentially in agreement with the school's policies on the placement of students into instructional levels, special programs, etc	☐	☐	☐	☐	☐	☐
149.	My principal keeps me well informed about district decisions affecting my work	☐	☐	☐	☐	☐	☐
150.	I do not understand how my work performance is evaluated	☐	☐	☐	☐	☐	☐
151.	I do not have enough control over the selection of student textbooks and reference materials	☐	☐	☐	☐	☐	☐
152.	Our system for reporting student progress to parents needs considerable improvement	☐	☐	☐	☐	☐	☐
153. (3-43)	There are effective channels of communication between the faculty and the school board	☐	☐	☐	☐	☐	☐
154.	The learning experiences in our school are diverse enough to accomodate the needs of most children	☐	☐	☐	☐	☐	☐
155.	The parents of individual students exert too great an influence on the professional work of this school	☐	☐	☐	☐	☐	☐
156.	Filling in this survey is a poor way of finding out how I feel about my work in this district	☐	☐	☐	☐	☐	☐
157. (3-47)	Some good may come out of filling in this survey	☐	☐	☐	☐	☐	☐

DEMOGRAPHIC DATA

Name ______________________ Birthdate ______________________
month day year

School ______________________

Department
(if applicable) ______________________ Sex ______ Male (1) ______ Female (2)

TEACHING EXPERIENCE

Grade level(s) Subject(s)

1. Present Position: ________ ______________________

2. Indicate the total number of years that you have been a teacher (include the current year). ________

3. Indicate the number of years you have been teaching at your present school. ________

4. Do you currently teach in more than one school? ________

5. In how many different schools have you taught? ________

6. In how many different districts have you been a teacher? ________

7. Did you have other full-time jobs (not summer jobs) before becoming a teacher?

   ___Yes ___No If yes, for how many years? ________

EDUCATIONAL BACKGROUND

1. Number of years of education completed (Please circle).

College				Graduate			
13	14	15	16	17	18	19	20+

2. Indicate your academic background. Also, indicate any current academic work in which you are engaged by writing IP for In Progress in the column labelled "Year Awarded."

	Field	Yr. Awarded
Bachelor's degree		
Teaching Certificate		
Master's Degree (Education		
Certificate of Advanced Studies		
Masters degree (subject field)		
PH.D or Ed.D		
Other (specify)		

ADDITIONAL ACTIVITIES

1. How many extracurricular assignments (e.g., coach, advisor or sponsor to student activities) do you have this current school year? ________

2. On approximately how many committees do you serve? (e.g., curriculum committees, planning committees, advisory committees, etc.). ________

Names of Committees	Position (e.g., member, chairman, secretary, etc.)

PROFESSIONAL MEMBERSHIPS

Organization	Check if currently a member	Number of Meetings Attended in each of the following years:			Indicate Total Number of Times in Period 1972-1974 you served in the following roles for meetings: (i) Speaker-SP (ii) Panel Member-PM (iii) Moderator-Mo (iv) Meeting Planner-MP	Offices or Committee Position Held in Period 1972-1974
		1972	1973	1974		
AFT						
IFT						
LCFT, Local 504						
WEA						
IEA						
NEA						

Appendix D

SECONDARY SCHOOL
FEEDBACK SURVEY

This questionnaire is part of The Organization Development Program which is currently being conducted in the School System. The purpose of this survey is to collect data from the teachers in your school concerning your attitudes toward the district and your own school. The information collected by means of this survey will be returned to your teacher group to provide the basis for problem-solving and change initiation. Even if your school is not participating in the program, the results of this survey will be made available to you.

The survey consists of a number of statements concerning your attitudes and opinions about various aspects of your work situation. Please read each statement carefully and decide how you feel about it. You might agree with some statements and disagree with others; and you may be undecided about some. In the boxes to the right of each statement, please mark the box which corresponds to your response.

The response code is as follows:

SA	A	U	D	SD	NA
(Strongly Agree)	(Agree)	(Undecided)	(Disagree)	(Strongly Disagree)	(Not Applicable)
☐	☐	☐	☐	☐	☐

Mark the "Not Applicable" box only if a statement is not applicable in your school or does not make sense.

Work rapidly, but please respond to each statement. Do not spend too much time on any one statement. Some of the statements might not be worded exactly as you would like them to be; however, answer them as best you can. If you would like to make a short comment regarding a particular statement, place a circle around your response and write your comment under the statement. Brief comments will be summarized and included as part of the feedback report to your teacher group.

We request that you complete the Demographic Data section which appears on the last two pages. We need this information for project evaluation purposes. Please be advised that all of your responses will be treated with the strictest confidentiality and that no one in your district will have access to any information provided by any individual teacher. All data will be summarized in statistical form by computer and the data to be returned to your school will be based on the responses of the entire teacher group.

We appreciate your cooperation and hope that you find the questionnaire interesting and thought-provoking.

1/20/75

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
1. (*1-7)	A proper amount of paraprofessional assistance is available to the teachers in this school......	☐	☐	☐	☐	☐	☐
2.	The students coming into my classes are academically well prepared............................	☐	☐	☐	☐	☐	☐
3.	Community groups make good use of school facilities..	☐	☐	☐	☐	☐	☐
4.	The school board seems more concerned about keeping costs down than about building an effective educational program...................	☐	☐	☐	☐	☐	☐
5.	Department heads do not receive adequate training for their roles............................	☐	☐	☐	☐	☐	☐
6. (1-12)	Our procedures make it easy for students to play school presonnel off against each other..........	☐	☐	☐	☐	☐	☐
7.	In so far as they affect me, the decisions made by the central office administration are fair and equitable.............................	☐	☐	☐	☐	☐	☐
8.	Registration procedures in this school are efficient......................................	☐	☐	☐	☐	☐	☐
9.	My schedule requires too many different preparations...................................	☐	☐	☐	☐	☐	☐
10.	The academic program fails to meet the needs of the student who is not heading toward college....	☐	☐	☐	☐	☐	☐
11. (1-17)	Little effort is made here to evaluate the effectiveness of our instructional program.........	☐	☐	☐	☐	☐	☐
12.	My principal fails to serve as a communication link between the teachers and the district administration and school board.................	☐	☐	☐	☐	☐	☐
13.	The departmental structure of this school causes many problems..........................	☐	☐	☐	☐	☐	☐
14.	I do not have enough control over the selection of student textbooks and reference materials.....	☐	☐	☐	☐	☐	☐
15.	We sometimes discipline students for the wrong reason in this school.........................	☐	☐	☐	☐	☐	☐
16. (1-22)	Teachers in this school are genuinely interested in helping each other with teaching problems.....	☐	☐	☐	☐	☐	☐
17.	Parent organizations exert too great an influence on educational matters of this school.......	☐	☐	☐	☐	☐	☐
18.	The orientation procedures for new teachers in this school are satisfactory.....................	☐	☐	☐	☐	☐	☐
19. (1-25)	There is little opportunity for me to take part in the development of the curriculum in my department....................................	☐	☐	☐	☐	☐	☐

			(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
	20.	I have opportunity during the school day to:						
(1-26)	a.	grade papers..............................	☐	☐	☐	☐	☐	☐
	b.	meet with students........................	☐	☐	☐	☐	☐	☐
	c.	meet with parents.........................	☐	☐	☐	☐	☐	☐
	d.	reflect on my teaching and plan ahead......	☐	☐	☐	☐	☐	☐
	e.	exchange ideas with other teachers.........	☐	☐	☐	☐	☐	☐
(1-31)	f.	meet with support staff....................	☐	☐	☐	☐	☐	☐
	21.	I am required to do too much administrative paper work (attendance reports, tardy slips, statistical reports, etc.)......................	☐	☐	☐	☐	☐	☐
	22.	I am provided with useful information through our student aptitude and achievement testing programs....................................	☐	☐	☐	☐	☐	☐
	23.	I am kept well-informed concerning available instructional resources..........................	☐	☐	☐	☐	☐	☐
	24.	The superintendent and his assistants seem to show a real interest in obtaining our ideas and suggestions..............................	☐	☐	☐	☐	☐	☐
(1-36)	25.	Curricular and/or extra-curricular offerings are available to meet the special interests of most students............................	☐	☐	☐	☐	☐	☐
	26.	My principal usually "goes to bat" for us with his/her superior.............................	☐	☐	☐	☐	☐	☐
	27.	I am asked to read too many communications from "higher-ups" in this school system.............	☐	☐	☐	☐	☐	☐
	28.	The learning experiences and courses of study in our school are diverse enough to accomodate the needs of most students.....................	☐	☐	☐	☐	☐	☐
	29.	The grading procedures available to faculty are satisfactory..............................	☐	☐	☐	☐	☐	☐
(1-41)	30.	Certain community groups exert too much influence on the professional work of this school......................................	☐	☐	☐	☐	☐	☐
	31.	Some of the faculty in this school think they run the place................................	☐	☐	☐	☐	☐	☐
1-43)	32.	A teacher in this school can develop a sense of professional competence.....................	☐	☐	☐	☐	☐	☐

			(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
(1-44)	33.	The drinking and drug problem is minimal in our school....................................	☐	☐	☐	☐	☐	☐
	34.	The following specialized services generally meet the needs of our students:						
		a. speech therapy............................	☐	☐	☐	☐	☐	☐
		b. special education.........................	☐	☐	☐	☐	☐	☐
		c. academic counseling.......................	☐	☐	☐	☐	☐	☐
		d. personal counseling.......................	☐	☐	☐	☐	☐	☐
(1-49)		e. career counseling.........................	☐	☐	☐	☐	☐	☐
		f. college counseling........................	☐	☐	☐	☐	☐	☐
		g. social work...............................	☐	☐	☐	☐	☐	☐
		h. psychological service.....................	☐	☐	☐	☐	☐	☐
		i. college placement.........................	☐	☐	☐	☐	☐	☐
(1-54)		j. vocational placement......................	☐	☐	☐	☐	☐	☐
	35.	The results of our student evaluation procedures do not constructively influence the educational programs of this school......................	☐	☐	☐	☐	☐	☐
	36.	The classrooms, offices, and other work areas here need considerable improvement.............	☐	☐	☐	☐	☐	☐
	37.	There are effective channels of communication between the faculty and the school board.......	☐	☐	☐	☐	☐	☐
	38.	I seldom get the help I need in handling difficult discipline cases....................	☐	☐	☐	☐	☐	☐
(1-59)	39.	We have adequate facilities in which students can study individually or in groups...........	☐	☐	☐	☐	☐	☐
	40.	Some people in this school system are too concerned with reputation, public relations, and making this district a "show case".........	☐	☐	☐	☐	☐	☐
	41.	People in this school cooperate well..........	☐	☐	☐	☐	☐	☐
	42.	Relations between the parents of students and the staff of this school need to be improved...	☐	☐	☐	☐	☐	☐
	43.	There are adequate procedures and facilities in this school for independent student study...	☐	☐	☐	☐	☐	☐
(1-64)	44.	Our principal fails to concern himself with important education matters faced by the faculty..	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
45. (1-65)	I am seldom encouraged to attend outside professional conferences and workshops	☐	☐	☐	☐	☐	☐
46.	Some students are continually disruptive of the educational process	☐	☐	☐	☐	☐	☐
47.	I am held accountable for things I have little control over	☐	☐	☐	☐	☐	☐
48.	Teachers are sufficiently aware of community resources which are available to help students with special needs	☐	☐	☐	☐	☐	☐
49.	I do not understand how my work performance is evaluated	☐	☐	☐	☐	☐	☐
50. (1-70)	The students seem to be reasonable satisfied with their school	☐	☐	☐	☐	☐	☐
51.	I am required to perform too many non-professional duties here (lunchroom, hall, studyhall, chaperoning, etc.)	☐	☐	☐	☐	☐	☐
52.	The use of instructional equipment is well coordinated within my school	☐	☐	☐	☐	☐	☐
53.	In my opinion, adequate educational standards are being upheld in my department	☐	☐	☐	☐	☐	☐
54.	The student records maintained in this district are concise and comprehensive	☐	☐	☐	☐	☐	☐
55. (1-75)	District administrators seem to take teachers' viewpoints into account when making decisions affecting the teaching staff	☐	☐	☐	☐	☐	☐
56.	I would prefer a different work assignment (grade level, subject matter, etc.) from the one I now have	☐	☐	☐	☐	☐	☐
57.	The quality of many of the textbooks used in my department is substandard	☐	☐	☐	☐	☐	☐
58.	The learning experiences provided by my department are diverse enough to accomodate the needs of most students	☐	☐	☐	☐	☐	☐
59. (*2-7)	Teachers receive adequate assistance in improving their teaching methods	☐	☐	☐	☐	☐	☐
60. (2-8)	This school assumes too many educational responsibilities that properly belong in the home or to other community agencies	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
61. (2-9)	Adequate procedures are available for a dissatisfied student to change classes, courses, or programs..................................	☐	☐	☐	☐	☐	☐
62.	Inexperienced teachers in this school receive inadequate supervision and help in improving their performance............................	☐	☐	☐	☐	☐	☐
63.	It is easy to appeal decisions made in the district which affect me adversely.............	☐	☐	☐	☐	☐	☐
64.	Student absences are excessive in this school...	☐	☐	☐	☐	☐	☐
65.	In my opinion, adequate educational standards are being upheld in this school...............	☐	☐	☐	☐	☐	☐
66. (2-14)	It is difficult to initiate the purchase of materials and equipment which I feel I need for teaching................................	☐	☐	☐	☐	☐	☐
67.	The division of responsibility among the administrators in this school is not clear to me...	☐	☐	☐	☐	☐	☐
68.	The school library and reference materials are adequate to meet instructional needs in my subject area................................	☐	☐	☐	☐	☐	☐
69.	Department heads in this school are generally effective..................................	☐	☐	☐	☐	☐	☐
70.	Our vocational education program seems to meet the needs of our students.....................	☐	☐	☐	☐	☐	☐
71. (2-19)	Our student achievement and aptitude testing programs are insensitive to the cultural differences among our students..................	☐	☐	☐	☐	☐	☐
72.	Solicitation of community opinions on certain matters is inadequate..........................	☐	☐	☐	☐	☐	☐
73.	The administrators in this school are not responsive to the particular needs of my department....................................	☐	☐	☐	☐	☐	☐
74.	In general, I approve of school board policies...	☐	☐	☐	☐	☐	☐
75.	The experienced teachers here do all they can to help new faculty members..................	☐	☐	☐	☐	☐	☐
76. (2-24)	Men and women in this district have equal opportunities for promotion and advancement....	☐	☐	☐	☐	☐	☐

			(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
(2-25)	77.	Students have adequate voice in the formulation of administrative procedures..................	☐	☐	☐	☐	☐	☐
	78.	Teachers in this district have enough autonomy to perform their roles in a flexible manner....	☐	☐	☐	☐	☐	☐
	79.	The following specialized programs here need to be greatly improved:						
		a. music..	☐	☐	☐	☐	☐	☐
		b. art..	☐	☐	☐	☐	☐	☐
		c. drama..	☐	☐	☐	☐	☐	☐
(2-30)		d. home economics...............................	☐	☐	☐	☐	☐	☐
		e. physical education...........................	☐	☐	☐	☐	☐	☐
		f. industrial arts..............................	☐	☐	☐	☐	☐	☐
		g. distributive education.......................	☐	☐	☐	☐	☐	☐
		h. vocational education.........................	☐	☐	☐	☐	☐	☐
(2-35)		i. drug education...............................	☐	☐	☐	☐	☐	☐
		j. driver's education...........................	☐	☐	☐	☐	☐	☐
		k. sex education................................	☐	☐	☐	☐	☐	☐
	80.	Our school district has good working relationships with other appropriate agencies in the community (eg., park district, police, community services)...	☐	☐	☐	☐	☐	☐
	81.	The members of my department work well together...	☐	☐	☐	☐	☐	☐
(2-40)	82.	Work-study programs for students in our community are inadequate.........................	☐	☐	☐	☐	☐	☐
	83.	I receive sufficient clerical assistance to do my job effectively.............................	☐	☐	☐	☐	☐	☐
	84.	The scheduling of students and classes in this school is too inflexible......................	☐	☐	☐	☐	☐	☐
	85.	Parents have enough involvement in the vocational or college counseling of their children........	☐	☐	☐	☐	☐	☐
	86.	People in this school provide one another with great support and encouragement................	☐	☐	☐	☐	☐	☐
(2-45)	87.	Teachers in this district are not involved enough in resolving school related problems with community agencies and organizations......	☐	☐	☐	☐	☐	☐

			(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
(2-46)	88.	Parking procedures and regulations are reasonable	☐	☐	☐	☐	☐	☐
	89.	Many of the graduates of this school are not prepared to assume the responsibilities of a job or college	☐	☐	☐	☐	☐	☐
	90.	The work of the following staff specialists in this district is well coordinated with the work of the classroom teachers						
		a. counselors	☐	☐	☐	☐	☐	☐
		b. librarians	☐	☐	☐	☐	☐	☐
		c. resource specialists	☐	☐	☐	☐	☐	☐
(2-51)		d. social workers	☐	☐	☐	☐	☐	☐
		e. nurses	☐	☐	☐	☐	☐	☐
		f. school psychologists	☐	☐	☐	☐	☐	☐
		g. curriculum specialists	☐	☐	☐	☐	☐	☐
		h. supervisors (subject matter)	☐	☐	☐	☐	☐	☐
(2-56)		i. speech therapists	☐	☐	☐	☐	☐	☐
	91.	Teachers and other professional personnel in this school freely share ideas and materials	☐	☐	☐	☐	☐	☐
	92.	Procedures for handling new students are satisfactory	☐	☐	☐	☐	☐	☐
	93.	So far as I am concerned, extracurricular duties (sponsoring student clubs and activities, etc.) are distributed fairly here	☐	☐	☐	☐	☐	☐
	94.	District administrators fail to concern themselves with important educational matters faced by the faculty	☐	☐	☐	☐	☐	☐
(2-61)	95.	Teachers in this school have insufficient time to consult with each other about problems they are having	☐	☐	☐	☐	☐	☐
	96.	Solicitation of student opinion on certain matters is inadequate	☐	☐	☐	☐	☐	☐
	97.	Interruptions (messages, monitors, intercom bulletins) are kept to a minimum here	☐	☐	☐	☐	☐	☐
	98.	The college preparatory programs in this school are sufficiently demanding of our students	☐	☐	☐	☐	☐	☐
(2-65)	99.	We have clear-cut instructional objectives in my department	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
100. (2-66)	This district's in-service educational program helps me improve my professional skills.........	☐	☐	☐	☐	☐	☐
101.	Teachers need more input into the selection of department heads.........................	☐	☐	☐	☐	☐	☐
102.	The drop-out rate is a problem in this district...	☐	☐	☐	☐	☐	☐
103.	I am asked to spend too much time in meetings around here..............................	☐	☐	☐	☐	☐	☐
104.	Most students in this school are involved and interested in their educational programs........	☐	☐	☐	☐	☐	☐
105. (2-71)	We should re-examine our tracking and ability-grouping policies...............................	☐	☐	☐	☐	☐	☐
106.	Enough attention is given by my department to the practical skills our students will need to live in our society............................	☐	☐	☐	☐	☐	☐
107.	My department is functioning effectively........	☐	☐	☐	☐	☐	☐
108.	We do not experience an excessive amount of class-cutting in this school...................	☐	☐	☐	☐	☐	☐
109.	We receive effective assistance in diagnosing the learning difficulties of individual pupils..	☐	☐	☐	☐	☐	☐
110. (2-76)	Extra-curricular activities often interfere with the course-work of students....................	☐	☐	☐	☐	☐	☐
111.	My work here provides me with ample opportunity for personal growth and development.............	☐	☐	☐	☐	☐	☐
112.	The administration in this school usually tries to take action on faculty complaints...........	☐	☐	☐	☐	☐	☐
113. (*3-7)	I receive little effective supervision..........	☐	☐	☐	☐	☐	☐
114.	My principal keeps me well-informed about district decisions affecting my work..............	☐	☐	☐	☐	☐	☐
115.	I approve of the classroom disciplinary policies which are practiced in this district...........	☐	☐	☐	☐	☐	☐
116.	I have sufficient supplies for my work..........	☐	☐	☐	☐	☐	☐
117.	Our system for reporting student progress to parents needs considerable improvement..........	☐	☐	☐	☐	☐	☐
118. (3-12)	Effective remedial help is available to any of my students who need it.......................	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
119. (3-13)	Communication between different departments and programs needs to be improved	☐	☐	☐	☐	☐	☐
120.	I'm rarely told whether or not I'm doing good work	☐	☐	☐	☐	☐	☐
121.	Students do not play enough of a role in the development of the instructional program	☐	☐	☐	☐	☐	☐
122.	Teachers in this school are open to professional assistance from one another	☐	☐	☐	☐	☐	☐
123.	My department head sometimes fails to get input from the members of the department before he/she makes decisions	☐	☐	☐	☐	☐	☐
124. (3-18)	People in this community appear to be "education-oriented"	☐	☐	☐	☐	☐	☐
125.	I have adequate opportunity to express my viewpoints about the philosophy and goals of my department	☐	☐	☐	☐	☐	☐
126.	The vocational programs in this district are sufficiently demanding of our students	☐	☐	☐	☐	☐	☐
127.	There is good coordination between the vocational and academic departments of the school	☐	☐	☐	☐	☐	☐
128.	The number of students I have to work with makes it difficult for me to do a good job	☐	☐	☐	☐	☐	☐
129. (3-23)	In my subject area, the quality of supplementary materials for student use needs to be greatly improved	☐	☐	☐	☐	☐	☐
130.	Our instructional program enables students to work at the pace that is best for them	☐	☐	☐	☐	☐	☐
131.	Most of the students I work with are placed at the instructional level that is best for them	☐	☐	☐	☐	☐	☐
132.	There is a spirit of willingness to experiment with new curriculum ideas in this school	☐	☐	☐	☐	☐	☐
133.	Student movement in the halls (e.g., between classes, to assemblies, to lunch) is often a cause of problems	☐	☐	☐	☐	☐	☐
134. (3-28)	Outstanding work by faculty members in this school is adequately rewarded	☐	☐	☐	☐	☐	☐

	SA	A	U	D	SD	NA
135. (3-29) We are seldom kept informed about what the school board and top administration are thinking.......	☐	☐	☐	☐	☐	☐
136. Students assume sufficient responsibility in running student activities......................	☐	☐	☐	☐	☐	☐
137. This school system effectively provides for the needs of the following types of exceptional students:						
a. slow learners.............................	☐	☐	☐	☐	☐	☐
b. gifted students..........................	☐	☐	☐	☐	☐	☐
c. physically handicapped students............	☐	☐	☐	☐	☐	☐
d. (3-34) students who speak a language other than English.................................	☐	☐	☐	☐	☐	☐
138. Relationships between schools in this district and the minority communities are constructive....	☐	☐	☐	☐	☐	☐
139. My principal has an unrealistic view of what goes on in my work situation......................	☐	☐	☐	☐	☐	☐
140. In general, the parents of the students here are interested in helping us educate their children.....	☐	☐	☐	☐	☐	☐
141. My department head demonstrates instructional leadership..................................	☐	☐	☐	☐	☐	☐
142. (3-39) The general educational programs of this school are sufficiently demanding of our students......	☐	☐	☐	☐	☐	☐
143. Non-routine events such as special assemblies, standardized testing, student elections, etc., are often poorly handled......................	☐	☐	☐	☐	☐	☐
144. I have ample opportunity to deal with the individual differences of my students..........	☐	☐	☐	☐	☐	☐
145. The instructional materials provided for my use here are very satisfactory....................	☐	☐	☐	☐	☐	☐
146. Adequate facilities are available for my use for grading papers, meeting with students and parents, and the like.................................	☐	☐	☐	☐	☐	☐
147. (3-44) There are adequate provisions for the security of property and people in this building.........	☐	☐	☐	☐	☐	☐
148. This district has not given sufficient consideration to the problems posed by socio-economic differences among students.....................	☐	☐	☐	☐	☐	☐
149. (3-46) Students do not make good use of the facilities, materials and equipment provided for their education at this school.......................	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
150. (3-47)	The academic program seems to meet the needs of college-bound students........................	☐	☐	☐	☐	☐	☐
151.	My recommendations about the placement of students into ability groups or special programs are usually followed...........................	☐	☐	☐	☐	☐	☐
152.	I am unable to make full use of the facilities, materials, and equipment provided for teachers at this school................................	☐	☐	☐	☐	☐	☐
153.	We lack satisfactory procedures in this district for evaluating student progress (e.g., achievement tests)..................................	☐	☐	☐	☐	☐	☐
154.	Our school has an excellent instructional resource center for meeting student needs.......	☐	☐	☐	☐	☐	☐
155. (3-52)	The layout of this school is inconvenient for the staff...	☐	☐	☐	☐	☐	☐
156.	The poor work performance of some people on this school staff makes it difficult for the school to achieve adequate instructional goals.........	☐	☐	☐	☐	☐	☐
157.	Teachers in this district have the proper amount of access to representatives of firms selling educational materials (e.g., texts, audi-visual equipment, etc.).........................	☐	☐	☐	☐	☐	☐
158.	This district too strongly emphasizes "professional development," graduate study, attending conferences, etc.......................	☐	☐	☐	☐	☐	☐
159.	The students I work with present an unusual amount of discipline problems..................	☐	☐	☐	☐	☐	☐
160. (3-57)	There is adequate space and equipment for carrying out my work -- including desk space, office space, drawers, bookshelves, and the like.......	☐	☐	☐	☐	☐	☐
161.	This school lacks an "atmosphere of learning"...	☐	☐	☐	☐	☐	☐
162.	Students with special learning problems have not received adequate attention by the time they reach our school.............................	☐	☐	☐	☐	☐	☐
163.	Effective curriculum assistance is provided to classroom teachers in my department..........	☐	☐	☐	☐	☐	☐
164.	My principal is fair in his/her dealings with me...	☐	☐	☐	☐	☐	☐
165. (3-62)	Our students are put under too much pressure to do well or to cover too much material..........	☐	☐	☐	☐	☐	☐
166. (3-63)	In my opinion, the right teachers are appointed to positions of special responsibility (e.g., department heads, committee chairmen, etc.)....	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
167. (3-64)	Students have proper access to the buildings and grounds..................................	☐	☐	☐	☐	☐	☐
168.	It is easy and convenient to get teaching aids and equipment into the classroom here..........	☐	☐	☐	☐	☐	☐
169.	Our students are offered worthwhile extra-curricular activities.........................	☐	☐	☐	☐	☐	☐
170.	I'm essentially in agreement with the school's policies on the placement of students into special programs, ability groups and courses of study......................................	☐	☐	☐	☐	☐	☐
171.	Closer community contact and cooperation is needed for many of our programs.................	☐	☐	☐	☐	☐	☐
172. (3-69)	The building and grounds where I work are kept as clean and attractive as possible.............	☐	☐	☐	☐	☐	☐
173.	The process for determining teaching assignments is fair and equitable in my department....	☐	☐	☐	☐	☐	☐
174.	Generally speaking, I feel I could do far better work with students different from those usually assigned to me................................	☐	☐	☐	☐	☐	☐
175.	Many people here are more concerned with their own personal interests than with the over-all welfare of the school........................	☐	☐	☐	☐	☐	☐
176.	Too many students here seem to be more interested in getting grades than in learning..............	☐	☐	☐	☐	☐	☐
177. (3-74)	Facilities for student projects and extra-curricular activities are adequate.............	☐	☐	☐	☐	☐	☐
178.	Going through "the proper channels" is stressed too much in this district......................	☐	☐	☐	☐	☐	☐
179.	I think my work performance is judged fairly here..	☐	☐	☐	☐	☐	☐
180.	A student here sometimes has to do without needed supplementary materials........................	☐	☐	☐	☐	☐	☐
181.	Physical facilities for the personal use of the students (washrooms, relaxation areas, lunch-room, etc.) are inadequate....................	☐	☐	☐	☐	☐	☐
182. (*4-7)	The parents of individual students exert too great an influence on the professional work of this school................................	☐	☐	☐	☐	☐	☐
183. (4-8)	My principal seems to take suggestions for improvement as a personal criticism............	☐	☐	☐	☐	☐	☐

		(1) SA	(2) A	(3) U	(4) D	(5) SD	(9) NA
184. (4-9)	There are many cliques or groups in this school that create a non-professional atmosphere.......	☐	☐	☐	☐	☐	☐
185.	Teachers have adequate input in determining the qualifications and hiring of new faculty members..................................	☐	☐	☐	☐	☐	☐
186.	My principal has sufficient influence with the district office................................	☐	☐	☐	☐	☐	☐
187.	The budgetary procedures are too rigid to permit special expenditures at the time they are needed..................................	☐	☐	☐	☐	☐	☐
188.	Teachers in this school keep the principals well-informed about classroom and teaching problems...	☐	☐	☐	☐	☐	☐
189. (4-14)	Some departments seem to ignore the overall curriculum of the school when determining the content of their courses..................	☐	☐	☐	☐	☐	☐
190.	My department head seldom shows initiative in seeking ways to help me in my work.............	☐	☐	☐	☐	☐	☐
191.	My principal backs me up in my dealings with parents.....................................	☐	☐	☐	☐	☐	☐
192.	For one reason or another, students are often unable to participate in the extra-curricular activities that interest them..................	☐	☐	☐	☐	☐	☐
193.	The general physical conditions of my work place (lighting, temperature, ventilation, etc.) hamper me in doing a good job..................	☐	☐	☐	☐	☐	☐
194. (4-19)	My principal seldom tries to get my ideas about things.....................................	☐	☐	☐	☐	☐	☐
195.	More interdepartmental cooperation is needed to solve some problems.........................	☐	☐	☐	☐	☐	☐
196.	Teachers receive administrative support in arranging new learning experiences for their students...................................	☐	☐	☐	☐	☐	☐
197.	The procedures for judging my performance are helpful to me in improving my work.............	☐	☐	☐	☐	☐	☐
198.	Our committee efforts and reports are frequently ignored..................................	☐	☐	☐	☐	☐	☐
199. (4-24)	Insufficient attention is directed toward developing the basic reading and writing skills of our students................................	☐	☐	☐	☐	☐	☐
200.	Most of the time it's safe to say what you think around here concerning school matters.....	☐	☐	☐	☐	☐	☐
201. (4-26)	My schedule requires too many different preparations...............................	☐	☐	☐	☐	☐	☐

		(1)	(2)	(3)	(4)	(5)	(9)
		SA	A	U	D	SD	NA
202. (4-27)	I have adequate opportunity to express my viewpoints about the philosophy and goals of this school..	☐	☐	☐	☐	☐	☐
203.	The student body in this school has the proper amount of self-governance......................	☐	☐	☐	☐	☐	☐
204.	Physical facilities for our personal use (lounge, washroom, etc.) need to be greatly improved......	☐	☐	☐	☐	☐	☐
205.	This school does a good job of preparing students to be responsible citizens.....................	☐	☐	☐	☐	☐	☐
206.	Most of the students I work with are in the program that is best for them....................	☐	☐	☐	☐	☐	☐
207. (4-32)	This school is not performing to its potential...	☐	☐	☐	☐	☐	☐
208.	My professional work load is fair and reasonable..	☐	☐	☐	☐	☐	☐
209.	The physical layout of this school sometimes causes problems for the students...............	☐	☐	☐	☐	☐	☐
210.	The policy in this school concerning discussion of controversial matters with students should be reevaluated.................................	☐	☐	☐	☐	☐	☐
211.	Most of the meetings I am required to attend here are worthwhile...........................	☐	☐	☐	☐	☐	☐
212. (4-37)	My department has an appropriate number of departmental meetings.........................	☐	☐	☐	☐	☐	☐
213.	Filling in this survey is a poor way of finding out how I feel about my work in this district..................................	☐	☐	☐	☐	☐	☐
214. (4-39)	Some good may come out of filling in this survey...	☐	☐	☐	☐	☐	☐

DEMOGRAPHIC DATA

Name ____________________ Birthdate ____________________

month day year

School ____________________

Department (if applicable) ____________________

Sex ______ Male (1) ______ Female (2)

TEACHING EXPERIENCE

		Grade level(s)	Subject(s)
1.	Present Position:	______	____________________

2. Indicate the total number of years that you have been a teacher (include the current year). ______

3. Indicate the number of years you have been teaching at your present school. ______

4. Do you currently teach in more than one school? ______

5. In how many different schools have you taught? ______

6. In how many different districts have you been a teacher? ______

7. Did you have other full-time jobs (not summer jobs) before becoming a teacher?

___Yes ___No If yes, for how many years? ______

EDUCATIONAL BACKGROUND

1. Number of years of education completed (Please circle).

College				Graduate			
13	14	15	16	17	18	19	20+

2. Indicate your academic background. Also, indicate any current academic work in which you are engaged by writing IP for In Progress in the column labelled "Year Awarded."

	Field	Yr. Awarded
Bachelor's degree	____________________	______
Teaching Certificate	____________________	______
Master's Degree (Education	____________________	______
Certificate of Advanced Studies	____________________	______
Masters degree (subject field)	____________________	______
PH.D or Ed.D	____________________	______
Other (specify)	____________________	______

ADDITIONAL ACTIVITIES

1. How many extracurricular assignments (e.g., coach, advisor or sponsor to student activities) do you have this current school year? ________

2. On approximately how many committees do you serve? (e.g., curriculum committees, planning committees, advisory committees, etc.). ________

Names of Committees	Position (e.g., member, chairman, secretary, etc.)

OFESSIONAL MEMBERSHIPS

Organization	Check if currently a member	Number of Meetings Attended in each of the following years:			Indicate Total Number of Times in Period 1972-1974 you served in the following roles for meetings: (i) Speaker-SP (ii) Panel Member-PM (iii) Moderator-Mo (iv) Meeting Planner-MP	Offices or Committe Position Held in Period 1972-1974
		1972	1973	1974		
AFT						
IFT						
CFT, Local 504						
WEA						
IEA						
NEA						

Appendix E

PRINCIPAL FEEDBACK SURVEY

This questionnaire is part of The Organization Development Program which is currently being conducted in School System. The purpose of this survey is to collect data from the district principals concerning their attitudes toward the district and their own schools. The information collected by means of this survey will be returned to the district principal group to provide the basis for problem solving and change initiation.

The survey consists of a number of statements concerning your attitudes and opinions about various aspects of your work situation. Please read each statement carefully and decide how you feel about it. You might agree with some statements and disagree with others; and you may be undecided about some. In the space to the left of each statement, please insert an:

"A" if you AGREE with the statement

"D" if you DISAGREE with the statement

"?" if you DON'T KNOW or are UNDECIDED

Work rapidly, but please respond to each statement. Do not spend too much time on any one statement. Some of the statements might not be worded exactly as you would like them to be; however, answer them as best you can. Use the agree and disagree response options whenever possible. If you really cannot decide about a statement, place a question mark in the appropriate space and go on to the next statement. If you would like to make a short comment regarding a particular statement, place a circle around your response and write your comment under the statement. Brief comments will be summarized and included as part of the feedback report to the Principal group.

We request that you provide your name and school on the last page of this survey. We need this information to keep track of responses and to match this questionnaire with later surveys which you might respond to. Please be advised that all of your responses will be treated with the strictest confidentiality and that no one in your district will have access to any information provided by any individual principal. All data will be summarized in statistical form by computer and the data to be returned to your district will be based on the responses of the entire principal group.

We appreciate your cooperation and hope that you find the questionnaire interesting and thought-provoking.

11/19/74

PS 1 ADMINISTRATIVE PRACTICES

_____ 1. This district has satisfactory procedures for selecting and promoting administrators and principals.

_____ 2. In so far as they affect my teachers, the decisions made by the central office administration are fair and equitable.

_____ 3. The budgetary procedures are too rigid to permit special expenditures at the time they are needed.

_____ 4. Some people in this school system are too concerned with reputation, public relations, and making this district a "show case."

_____ 5. District administrators fail to concern themselves with important educational matters faced by my faculty.

_____ 6. Going through "the proper channels" is stressed too much in this district.

_____ 7. We are sometimes expected to implement new curricula with insufficient personnel, facilities, or assistance.

_____ 8. This district makes every effort to recruit high quality professional staff personnel.

_____ 9. This district makes every effort to recruit high quality non-professional staff personnel.

_____ 10. Principals have sufficient control over the selection of new professional personnel who serve in their schools.

_____ 11. My recommendations for staff promotions and placement carry sufficient weight.

_____ 12. Staff personnel records, as presently maintained in this district, are useful to me.

_____ 13. District personnel seem to be sensitive to the problems which might accompany policy changes.

_____ 14. The financial and business managers in this district are available for consultation when needed.

_____ 15. Bus scheduling is sometimes poorly executed in this district.

_____ 16. I sometimes face unnecessary problems in coordinating and directing the school lunch program.

_____ 17. Each school has sufficient autonomy in dealing with its own individual problems.

PS 2 WORK LOAD

_____ 1. Most of the meetings I am required to attend in this district are worthwhile.

_____ 2. Too often principals are asked to work on committees whose efforts and reports are subsequently ignored.

_____ 3. My work load is spread too unevenly over the school year.

_____ 4. I receive sufficient clerical assistance to do my job effectively.

_____ 5. This district assumes too many educational responsibilities that properly belong in the home or to other community agencies.

_____ 6. It is sometimes difficult to obtain substitute teachers.

_____ 7. My staff is required to spend too much time maintaining student records.

_____ 8. I have to spend too much time dealing with students with behavioral problems.

_____ 9. In their present form, student attendance and tardiness accounting procedures consume too much time.

10. I don't have enough time to:

_____ a. assist my teachers in instructional improvement

_____ b. meet with parents

_____ c. meet with students

_____ d. evaluate teachers

PS 3 MATERIALS & EQUIPMENT / BUILDINGS & FACILITIES

_____ 1. The instructional materials available for the use of my teachers are very satisfactory.

_____ 2. The school library and reference materials are adequate to meet instructional needs.

_____ 3. There is too much red tape involved in requisitioning materials and equipment which my teachers need for instructional purposes.

_____ 4. The building and grounds where I work are kept as clean and attractive as possible.

_____ 5. The general physical conditions of my office (lighting, temperature, ventilation, etc.) hamper me in doing a good job.

_____ 6. The classrooms, offices, and other work areas in my school need considerable improvement.

_____ 7. The layout of this school is inconvenient for the staff.

_____ 8. The use of instructional equipment is well coordinated within this district.

_____ 9. Our procedures for inventorying equipment and supplies need revision.

_____ 10. Staff members use available facilities and materials as effectively as possible.

_____ 11. There are no conditions in my building which could threaten the safety of students and staff.

_____ 12. Our policies for the use of school facilities by non-school groups are fair and equitable.

_____ 13. Modifications and expansions of school buildings are well-planned in this system.

_____ 14. It is difficult to obtain building and grounds maintenance services when needed.

PS 4 EDUCATIONAL EFFECTIVENESS

_____ 1. The learning experiences in our school are diverse enough to accomodate the needs of most children.

_____ 2. In my opinion, adequate educational standards are being upheld in this district.

_____ 3. In general, the schools in this district are not performing to their potential.

_____ 4. Insufficient attention is directed toward developing the basic reading and writing skills of our students.

_____ 5. This district has not given sufficient consideration to the problems posed by socio-economic differences among students.

_____ 6. Our students are offered worthwhile extra-curricular activities.

_____ 7. Our instructional program enables students to work at the pace that is best for them.

PS 5 EVALUATION OF STUDENTS

_____ 1. The results of our student evaluation procedures do not constructively influence the educational programs of this district.

_____ 2. We lack satisfactory procedures in this district for evaluating student progress (e.g., achievement tests).

_____ 3. Our system for reporting student progress to parents needs considerable improvement.

_____ 4. Our student aptitude and achievement testing programs provide my faculty members with useful information.

_____ 5. Our student achievement and aptitude testing programs are insensitive to the cultural differences among our students.

_____ 6. The student records maintained in this district are concise and comprehensive.

_____ 7. There is an adequate program of student-teacher consultation after each reporting period in this school.

PS 6 SPECIAL SERVICES

_____ 1. Teachers receive adequate assistance in improving their teaching methods.

_____ 2. Effective curriculum assistance is provided to classroom teachers in this district.

3. This school system effectively provides for the needs of the following groups of exceptional students:

_____ a. slow learners

_____ b. gifted students

_____ c. physically handicapped students

_____ 4. Effective remedial help is available to any of our students who need it.

_____ 5. There is a spirit of willingness to experiment with new curriculum ideas in this district.

_____ 6. The library and instructional resource services in this district are excellent.

7. The following specialized programs need to be greatly improved:

_____ a. music

_____ b. art

_____ c. drama

_____ d. physical education

8. In this district, the following specialized services generally meet the needs of our students:

_____ a. EMH

_____ b. speech therapy

_____ c. guidance counseling

_____ d. social work

_____ e. psychological services

_____ f. learning disabilities

PS 6 SPECIAL SERVICES (cont.)

9. The work of the following staff specialists in this district is well coordinated with the work of classroom teachers:

_____ a. guidance couselors

_____ b. librarians

_____ c. social workers

_____ d. nurses

_____ e. school psychologist

_____ f. curriculum specialists

_____ 10. Little effort is made to evaluate the effectiveness of the district's instructional programs.

_____ 11. Teachers in this district receive effective assistance in diagnosing the learning difficulties of individual pupils.

_____ 12. We have a good pool of substitute teachers.

_____ 13. Scheduling students for counseling often causes problems.

PS 7 SCHOOL - COMMUNITY RELATIONS

_____ 1. Parent organizations exert too great an influence on educational matters in this district.

_____ 2. Our school district has good working relationships with other appropriate agencies in the community (e.g., park district, police, community services).

_____ 3. Certain community pressure groups exert too much influence on the professional work of this district.

_____ 4. Solicitation of community opinions on certain matters is inadequate.

_____ 5. People in this community appear to be "education-oriented."

_____ 6. In general, the parents of our students appear to be interested in helping us educate their children.

_____ 7. In general, I approve of school board policies.

_____ 8. The school board seems more concerned about keeping costs down than about building an effective educational program.

_____ 9. There are effective channels of communication between the building principals and the school board.

_____ 10. Very informative reports and bulletins are prepared in this district for community distribution.

_____ 11. This school district has an excellent program for effecting favorable school-community relations.

_____ 12. This district has good working relations with other agencies concerned with education (e.g., State Board of Education, federal funding agencies, etc.).

_____ 13. District policy sometimes prevents me from granting reasonable parental requests.

_____ 14. Parental complaints are not always handled at the most appropriate level.

_____ 15. My staff is sensitive to the nature of the community where our students live.

PS 8 SUPERVISORY RELATIONS

_____ 1. District office administrators usually "go to bat" for us principals with the school board.

_____ 2. Teachers in my school keep me well informed about classroom and teaching problems.

_____ 3. This district office backs me up in my dealings with parents and community groups.

_____ 4. Some people in the district office seem to take suggestions for improvement as a personal criticism.

_____ 5. Some of my teachers seem to take suggestions for improvement as a personal criticism.

_____ 6. My teachers have an unrealistic view of what goes on in my work situation.

_____ 7. The district office staff has an unrealistic view of what goes on in the schools.

_____ 8. Our superintendent sometimes fails to concern himself with important problems faced by principals.

_____ 9. I amsometimes unsure as to how much I should involve myself with the instructional activities of my staff.

PS 9 STAFF RELATIONS

_____ 1. The poor work performance of some people in my school makes it difficult for the school to achieve adequate instructional goals.

_____ 2. People in my school cooperate well.

_____ 3. Teachers and other professional personnel in my school freely share ideas and materials.

_____ 4. People in my school provide one another with great support and encouragement.

_____ 5. The role relationship between teachers and principals in this district is clear.

_____ 6. The teachers here have a tendency to "gripe" rather than to present me with well thought out statements concerning their work problems.

_____ 7. I often have to solve problems which could be more appropriately solved by the faculty.

_____ 8. Faculty members, as a team, frequently have generated creative and innovative solutions to school problems.

_____ 9. Securing teacher cooperation with certain district policies occupies too much of my time.

_____ 10. Unrealistic teacher expectations and attitudes cause difficulty for me in my job.

_____ 11. It is a big problem to obtain staff cooperation in supervising special activities for students.

PS 10 VOICE IN EDUCATIONAL PROGRAM

_____ 1. I have adequate opportunity to express my viewpoints about the philosophy and goals of this school system.

_____ 2. District office personnel usually try to take action on complaints coming from the schools.

_____ 3. We are not always kept informed about what the school board and top administration are thinking.

_____ 4. Teachers have sufficient voice in the determination of general instructional policies in this district.

_____ 5. Teachers in this district are not involved enough in resolving school-related problems with community agencies and organizations.

_____ 6. Teachers should have more involvement than they presently have in revising the curriculum.

_____ 7. The demands of coordination between elementary and secondary schools makes curriculum modification difficult.

_____ 8. This district encourages instructional research and experimentation on the part of individual schools.

_____ 9. I have sufficient influence over the construction of this district's budget.

_____ 10. Faculty members have sufficient influence over the construction of the district's budget.

_____ 11. Principals in this district are not involved enough in resolving school-related problems with community agencies and organizations.

PS 11 PERFORMANCE AND DEVELOPMENT

_____ 1. Outstanding work by school personnel is adequately rewarded in this district.

_____ 2. I'm rarely told whether or not I'm doing good work.

_____ 3. I do not understand how my work performance is evaluated.

_____ 4. I am seldom encouraged to attend outside professional conferences and workshops.

_____ 5. My work here provides me with ample opportunity for personal growth and development.

_____ 6. Men and women in this district have equal opportunities for promotion and advancement.

_____ 7. This district too strongly emphasizes "professional development," graduate study, attending conferences, etc.

_____ 8. Our procedures for evaluating faculty members seem to be effective.

_____ 9. Our procedures for evaluating administrators seem to be effective.

_____ 10. Our procedures for evaluating non-professional staff members seem to be effective.

_____ 11. Our teacher in-service education programs genuinely promote staff development.

_____ 12. Teachers have insufficient voice in the selection of in-service educational programs.

_____ 13. This district provides adequate in-service education for principals.

PS 12 STUDENTS

_____ 1. We have clear-cut instructional objectives in this district.

_____ 2. We should re-examine our tracking and ability-grouping policies.

_____ 3. The educational program of my school is sufficiently demanding of our students.

_____ 4. The way in which my teachers move students (e.g., between classes, to assemblies, to lunch) often causes problems.

_____ 5. The parents of our students seem more interested in the grades their children receive than in the learning that goes on.

_____ 6. In my opinion, our students show normal consideration, courtesy, and respect.

_____ 7 Student absences are excessive in this district.

_____ 8. Our students are put under too much pressure to do well or to cover too much material.

_____ 9. Our procedures for scheduling the students' day work effectively.

PS 13 PRINCIPAL RELATIONS

_____ 1. Most of my fellow principals work for the best interests of all the schools in this district rather than only for their own schools.

_____ 2. The information which we principals exchange among ourselves is often inaccurate.

_____ 3. Principals in this district are open to professional assistance from one another.

_____ 4. More cooperation among principals in this district could reduce some unnecessary duplication of effort.

_____ 5. Principals in this district provide one another with great support and encouragement.

_____ 6. Principals in this district regularly exchange useful ideas on staff supervision and development.

_____ 7. There is adequate coorperation between the schools in this district in developing special extra-curricular activities for students.

_____ 8. There is an appropriate amount of cooperation among principals in planning in-service activities.

_____ 9. Increased district-wide effort is needed to cope with many of the problems we face.

PS 14 DISTRICT OFFICE - PRINCIPAL RELATIONS

____ 1. The district office prevents me from making many decisions I should be free to make.

____ 2. The suggestions of principals seem to carry considerable weight with the district office when important decisions are made.

____ 3. I get accurate information from the district office.

____ 4. The discussions I have with the district office seldem help me solve specific problems.

____ 5. I sometimes feel I can't be open and "above board" with the district office in communicating work problems.

____ 6. District personnel provide me with the proper amount of assistance in staff supervision.

____ 7. The central office has realistic expectations concerning the role of the principal.

PS 15 REACTIONS TO SURVEY

_____ 1. Filling in this survey is a poor way of finding out how I feel about my work in this district.

_____ 2. Some good may come out of filling in this survey.

Name ______________________________

School ____________________________

Appendix F

SCHOOL SYSTEM DESCRIPTION-EVALUATION QUESTIONNAIRE

DEMOGRAPHIC DATA

Name____________________________ Birthdate______________________________
month day year

School__________________________

Department
(If applicable)_________________ Sex:_________Male (1) ______Female (2)

Grade level(s) Subject(s)

Present Teaching Position:______________ ____________________________________

Indicate the number of years you have been teaching at your present school. ________

Indicate the total number of years that you have been a teacher (include the current year). ________

Number of years of education completed (please circle).

College				Graduate			
13	14	15	16	17	18	19	20+

PART I

INSTRUCTIONS: Below is a list of statements that can be used to describe people's jobs. In the blank beside each statement please write the number of the response category that best describes how you feel the statement applies to this school.

1)Strongly Agree 2)Agree 3)Mildly Agree 4)Mildly Disagree 5)Disagree 6)Strongly Disagree

*2-8 ____ 1. I look forward to being with the people in my faculty each day.

____ 2. I would describe my job as being routine.

____ 3. When faced with a situation that is new and not covered by existing procedures, I feel free to adapt to the requirements of the situation.

____ 4. We have procedures to follow in dealing with most situations that might arise in this school.

____ 5. How things are done around here is left pretty much up to the person doing the work.

2-13 ____ 6. Even small matters have to be referred to someone higher up for a final answer.

____ 7. Following established rules and procedures, even when they don't seem appropriate to the situation, is the safest course to follow around here.

____ 8. A person who wants to make his or her own decisions would be quickly discouraged here.

____ 9. I feel I am really a part of my school.

____ 10. When faced with new demands in my work, I am able to get additional information that I need.

2-18 ____ 11. Teachers are required to follow an adopted course of study.

____ 12. Most jobs here have something new happening every day.

____ 13. Excess rules, administrative details, and red-tape make it difficult for new and original ideas to receive consideration around here.

____ 14. Procedures for disciplining students are well defined.

____ 15. I am not expected to seek approval from above when I decide on a course of action.

2-23 ____ 16. I would not like to be part of another faculty.

____ 17. The administration adheres to established rules and regulations in dealing with the teaching staff.

____ 18. Uniform grading procedures are required.

____ 19. I always have the same areas of responsibility in performing my job.

____ 20. I have the necessary authority to make changes in how I do my job when situations require it.

2-28 ____ 21. Whenever we have a problem, we are supposed to go through formal channels for an answer.

____ 22. I do not have confidence and trust in the people I work with.

____ 23. One thing people like around here is the variety in their work.

____ 24. The people I work with have high standards of performance.

____ 25. People around here are often permitted to use their own professional judgement in handling problems they face on their job.

____ 26. Most people here make their own rules on the job.

2-34 ____ 27. We have procedures to follow in dealing with whatever situation arises.

PART II

INSTRUCTIONS: Below is a list of individuals/groups that might influence various activities in your school. Please answer the three questions below for EACH of these individuals/groups as they apply to your experience in this school. In answering the three questions below in Columns A, B, and C, circle the number representing the following response categories:

1	2	3	4	5	9
No influence at all	Little influence	Some influence	Substantial influence	Very Strong influence	Not Applicable

A. In COLUMN A, please indicate how much influence this individual/group has on goals, policies, and programs in this school.

B. In COLUMN B, please indicate how much influence this individual/group has on the way resources are distributed for this school.

C. In COLUMN C, please indicate how much influence this individual/group has in determining the things you do in your job.

2-35 *3-8 3-32

		A						B						C					
		Influence on policy						Influence in resource distribution						Influence over your job					
1.	Students	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
2.	Teachers	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
3.	Principals	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
4.	Central Office	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
5.	The Superintendents	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
6.	Board of Education	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
7.	Parents	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
8.	Parent-Teacher Organizations	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
9.	Influential citizens	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
10.	The AFT and affiliates	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
11.	The NEA and affiliates	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
12.	The minority communities	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
13.	The business community	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
14.	The news media	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
15.	Other schools	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
16.	Area colleges and universities	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
17.	The city government	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
18.	The state government	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
19.	The federal government	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
20.	The judicial system	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
21.	The local police department	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
22.	The park district	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
23.	Community health agencies	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9
24.	Accrediting associations	1	2	3	4	5	9	1	2	3	4	5	9	1	2	3	4	5	9

2-58 3-31 3-55

PART III

INSTRUCTIONS: Below is a list of job characteristics for which you are asked to indicate your degree of satisfaction. Please write the number of the appropriate response category in the blank beside each characteristic.

1	2	3	4	5	6
Very Dissatisfied	Dissatisfied	Mildly Dissatisfied	Mildly Satisfied	Satisfied	Very Satisfied

How satisfied are you with:

3-56 _____ 1. The amount of supervision you receive?

_____ 2. The feeling of security in your job?

_____ 3. The pay for your job?

_____ 4. The opportunity,in your job,to develop close friendships?

_____ 5. The authority connected with your job?

3-61 _____ 6. The feeling of self-esteem or self-respect you get from being in your job?

_____ 7. The opportunity for personal growth and development in your job?

_____ 8. The prestige of your job inside the district (that is, the regard received from others employed in the district)?

_____ 9. The opportunity for independent thought and action in your job?

_____ 10. The feeling of worthwhile accomplishment in your job?

-66 _____ 11. The opportunity, in your job, for participation in the determination of methods, procedures, and goals?

_____ 12. The opportunity for promotion in this district?

_____ 13. Your present job in light of your career expectations?

_____ 14. The amount of respect and fair treatment you receive from your superiors?

_____ 15. The feeling of being informed in your job?

_____ 16. The prestige of your job outside the district (that is, the regard received from people not employed in the district)?

3-72 _____ 17. Your present job when you consider the expectations you had when you took the job?

PART IV

INSTRUCTIONS: Most people occasionally feel bothered by certain kinds of things in their work. Below is a list of things that sometimes bother people. Please indicate in the blank beside each item how frequently you feel bothered by it. Use one of the numbers from the response categories below.

1. Never 2. Rarely 3. Sometimes 4. Rather Often 5. Nearly all of the time

How often are you bothered by:

4-8 _____ 1. Feeling that you have too little authority to carry out the responsibilities assigned to you.

_____ 2. Being unclear on just what the scope and responsibilities of your job are

_____ 3. Not knowing what opportunities for advancement or promotion exist for you.

_____ 4. Thinking that you'll not be able to satisfy the conflicting demands of various people.

_____ 5. Feeling that you're not fully qualified to handle your job.

4-13 _____ 6. Not knowing what your superior thinks of you, how he evaluates your performance.

_____ 7. The fact that you can't get information needed to carry out your job.

_____ 8. Having to decide things that affect the lives of students.

_____ 9. Feeling that you may not be liked and accepted by the people you work with.

4-1 _____ 10. Feeling unable to influence your immediate superior's decisions and actions that affect you.

1. Never 2. Rarely 3. Sometimes 4. Rather Often 5. Nearly all of the time

4-18 _____ 11. Not knowing just what the people you work with expect of you.

_____ 12. Thinking that the amount of work you have to do may interfere with how well it gets done.

_____ 13. Feeling that you have to do things on the job that are against your better judgment.

_____ 14. Feeling that your job tends to interfere with your family life.

_____ 15. Feeling that your progress on the job is not what it should be or could be.

4-23 _____ 16. Feeling that you have too much responsibility and authority delegated to you by your superiors.

_____ 17. Feeling that you don't have time to do everything that others ask of you.

_____ 18. Feeling that you don't seem to have enough time to get things done.

4-26 _____ 19. Not knowing the criteria used to judge your performance.

PART V

INSTRUCTIONS: Below is a list of items concerning the problem-solving and change processes in a school district. Please write the number of the appropriate response category in the blank beside each item.

1. Strongly Agree 2. Agree 3. Mildly Agree 4. Mildly Disagree 5. Disagree 6. Strongly Disagree

4-27 _____ 1. In this school, faculty members are given sufficient opportunity to discuss and define school goals.

_____ 2. The serious problems in this school, the type which present great difficulties for the faculty, have not been recognized by the principal and his assistants.

_____ 3. The administration (superintendent, assistant superintendent, district personnel) have often been unable or unwilling to cope with the problems that have been identified by the faculty.

_____ 4. This school has provided the faculty with procedures and mechanisms for evaluating our work situation (for example, problem-solving sessions, special committees, surveys, etc.).

_____ 5. Faculty meetings and committees have not been utilized effectively for the identification of specific school problems.

4-32 _____ 6. School problems and needs have been carefully analyzed in terms of their basic reasons and causes.

_____ 7. There are continuing demands or pressures from people in this school to change the way we carry out our activities.

_____ 8. People are continually trying to identify areas in which change and innovation are needed in the way we carry out our activities in this school.

_____ 9. I sometimes feel that it is not worth spending a lot of time trying to solve this school's problems by introducing new ideas.

4-36 _____ 10. Many of the people in this school are not keeping abreast of the changes and innovations that are occurring in education.

1. Strongly Agree 2. Agree 3. Mildly Agree 4. Mildly Disagree 5. Disagree 6. Strongly Disagree

4-37 _____ 11. Meetings and group sessions are regularly conducted so faculty members can solve problems as a team.

_____ 12. In this school system, many administrators try to solve problems and make decisions which could be dealt with more effectively by faculty members.

_____ 13. Faculty members as a group are effective in generating solutions to school problems.

_____ 14. Very few faculty members participate in solving problems and identifying new alternatives.

_____ 15. The administration supports and encourages faculty in developing new teaching practices.

4-42 _____ 16. Faculty members are reluctant to discuss their ideas with other people in this school district.

_____ 17. When considering new ways we could serve our students better, there is insufficient communication across departmental lines.

_____ 18. There has been insufficient communication across grade levels concerning changes that are needed in our educational program.

_____ 19. Faculty members have been provided with sufficient opportunity to discuss new ideas for change with teachers from other schools in this district.

_____ 20. Information about proposed changes more often flows down (than up) the organizational hierarchy in this school district.

4-47 _____ 21. I do not know what types of changes must be approved by the administration before they can be implemented.

_____ 22. When faculty suggestions have been denied administrative approval, recommendations for the modification of the idea usually have been presented to the faculty.

_____ 23. It takes an excessive amount of time to get new ideas approved in this district.

_____ 24. Our principal regularly meets with faculty representatives to discuss our suggestions and ideas.

_____ 25. Decisions get "hung up" in committees in this school and district.

4-52 _____ 26. Decisions made by this faculty are sometimes ignored or reversed by the administration.

_____ 27. New programs adopted in this school often are not tailored to the problems we have.

_____ 28. When a new program is put into practice, faculty members have a clear idea of what is expected of them.

_____ 29. We spend sufficient time planning changes that are to be made in this school.

_____ 30. Ideas, solutions, and changes preferred by the district administration are generally consistent with those preferred by the faculty.

4-57 _____ 31. Change in this school often creates problems because many individuals are unwilling to change their habits.

_____ 32. Faculty members have often disliked many of the changes made in this school.

_____ 33. When new programs are put into practice around here, faculty members have received training they might need concerning new roles and procedures.

_____ 34. The manner in which changes are made in this school sometimes creates problems for the teacher.

4-61 _____ 35. There has been good communication between the faculty and the principal concerning the success or failure of new programs.

1. Strongly Agree 2. Agree 3. Mildly Agree 4. Mildly Disagree 5. Disagree 6. Strongly Disagree

4-62 _____ 36. Ideas for change that are presented and promoted by faculty members are rarely implemented.

_____ 37. Faculty members don't have enough influence over new programs that are put into practice.

_____ 38. Personnel in this school are willing to work through the problems that often accompany change.

_____ 39. Any problems caused by new programs are effectively dealt with.

_____ 40. For one reason or another, new programs and innovations are often discontinued.

4-67 _____ 41. Attempts have been made, either formally or informally, to evaluate the effectiveness of new programs.

_____ 42. This school is generally quick to use innovative instructional methods.

_____ 43. Attempts to change or innovate in this school have not had much effect on this school's actual performance.

_____ 44. Individuals or small groups of faculty are encouraged to try out new practices or materials.

4-71 _____ 45. Individual teachers have sufficient autonomy in rejecting or accepting an innovation.

PART VI

Below is a list of decisions that are commonly made in school systems. For each of these decisions please answer the two questions below. In answering the two questions in Columns A and B below please use the following response categories.

1	2	3	4	5
Never	Seldom	Sometimes	Often	Always

A: In COLUMN A please indicate to what extent you participate in this decision.

*5 B: In COLUMN B please indicate to what extent you think you should participate in this decision.

5-8 5-20

	A ACTUAL PARTICIPATION					B SHOULD PARTICIPATE				
1. Hiring new professional personnel.	1	2	3	4	5	1	2	3	4	5
2. Selecting specific instructional texts.	1	2	3	4	5	1	2	3	4	5
3. Resolving learning problems of individual students.	1	2	3	4	5	1	2	3	4	5
4. Determining appropriate instructional methods and techniques.	1	2	3	4	5	1	2	3	4	5
5. Establishing general instructional policies.	1	2	3	4	5	1	2	3	4	5
6. Establishing classroom disciplinary policies.	1	2	3	4	5	1	2	3	4	5
7. Planning school budgets.	1	2	3	4	5	1	2	3	4	5
8. Determining specific professional assignments.	1	2	3	4	5	1	2	3	4	5
9. Resolving employee grievances.	1	2	3	4	5	1	2	3	4	5
10. Planning new buildings and facilities	1	2	3	4	5	1	2	3	4	5
11. Resolving problems with community groups.	1	2	3	4	5	1	2	3	4	4
12. Determining professional salaries.	1	2	3	4	5	1	2	3	4	5

5-19 5-31

PART VII

INSTRUCTIONS: Please indicate the extent of your agreement or disagreement with each of the following general opinions. Write the number of the appropriate response category in the blank beside each statement.

1) Strongly Agree 2) Agree 3) Mildly Agree 4) Mildly Disagree 5) Disagree 6) Strongly Disagree

---

5-32 ____ 1. Many of our most important decisions are based upon insufficient information.

____ 2. Teachers or supervisors who hand out vague assignments give a chance for one to show initiative and originality.

____ 3. A good teacher is one who makes you wonder about your way of looking at things.

____ 4. In the long run, it is possible to get more done by tackling small, simple problems rather than large and complicated ones.

____ 5. What we are used to is always preferable to what is unfamiliar.

5-37 ____ 6. An expert who doesn't come up with a definite answer probably doesn't know too much.

____ 7. There is really no such thing as a problem that can't be solved.

____ 8. A good job is one where what is to be done and how it is to be done are always clear.

____ 9. I would like to live in a foreign country for a while.

____ 10. People who fit their lives to a schedule probably miss most of the joy of living.

5-42 ____ 11. It is more fun to tackle a complicated problem than to solve a simple one.

____ 12. Often, the most interesting and stimulating people are those who don't mind being different and original.

____ 13. People who insist upon a yes or no answer just don't know how complicated things really are.

____ 14. A person who leads an even, regular life in which few surprises or unexpected happenings arise, really has a lot to be grateful for.

____ 15. I like parties where I know most of the people more than ones where all or most of the people are complete strangers.

5-47 ____ 16. The sooner we all acquire similar values and ideals the better.

____ 17. The most interesting life is to live under rapidly changing conditions.

____ 18. It's satisfying to know pretty much what is going to happen on the job from day to day.

____ 19. Off with the old, on with the new, even though a person rarely knows what the "new" will be.

____ 20. When planning a vacation, a person should have a schedule to follow if he's really going to enjoy himself.

____ 21. Adventurous and exploratory people go farther in this world than do systematic and orderly people.

5-53 ____ 22. A really satisfying life is a life of problems. When one is solved, one moves on to the next problem.

PART VII

INSTRUCTIONS: Below is listed a sample of goals that schools are often concerned with. Some of these may apply to your school and some may not. For each of the goals, please answer the following questions:

A. Circle the response number in Column A that indicates to what extent this goal is presently stressed in your school. The responses are:

1	2	3	4	5
Receives no attention or resources	Receives little attention and/or resources	Receives some attention and/or resources	Receives considerable attention and/or resources	Receives major attention and/or resources

B. Circle the response number in Column B that indicates how effective your school is in achieving this goal. The responses are:

1	2	3	4	5
Not at all effective	Barely effective	Somewhat effective	Effective	Extremely effective

5-54	A Attention-Resources					B Effectiveness					5-66
1. To develop a highly qualified professional staff.	1	2	3	4	5	1	2	3	4	5	
2. To implement a comprehensive and integrated instructional program.	1	2	3	4	5	1	2	3	4	5	
3. To provide a positive and supportive school environment and atmosphere for the students.	1	2	3	4	5	1	2	3	4	5	
4. To provide programs of diverse philosophies.	1	2	3	4	5	1	2	3	4	5	
5. To provide on-going evaluation of school programs for purposes of program modification and development.	1	2	3	4	5	1	2	3	4	5	
6. To experiment with promising educational innovations.	1	2	3	4	5	1	2	3	4	5	
7. To be responsive to the needs concerns and desires of the community.	1	2	3	4	5	1	2	3	4	5	5-72
8. To communicate to the public the objectives, operations, and results of the educational programs.	1	2	3	4	5	1	2	3	4	5	
9. To promote educational achievement of minority students.	1	2	3	4	5	1	2	3	4	5	
10. To coordinate school activities with those of relevant community groups, agencies and organizations.	1	2	3	4	5	1	2	3	4	5	
11. To keep down costs and expenditures on a day to day basis.	1	2	3	4	5	1	2	3	4	5	
12. To lessen disciplinary problems. 5-65	1	2	3	4	5	1	2	3	4	5	5-77

INSTRUCTIONS: Below is a list of statements that can be used to describe different reactions and opinions about conflict within schools. Please write the number of the response category that best describes your opinion about conflict in the blank beside each statement.

1. Strongly Agree 2. Agree 3. Mildly Agree 4. Mildly Disagree 5. Disagree 6. Strongly Disagree

5-78 _____ 1. Conflict is normal and acceptable in schools.

→6-8 _____ 2. People should suppress conflict and disagreements and not offend others.

_____ 3. One benefit from conflict and disagreements is that they tend to draw a school together.

_____ 4. Compromise is the same as betraying one's position.

_____ 5. Bargaining is detrimental within a school.

_____ 6. Conflict is upsetting to school personnel.

6-13 _____ 7. Conflict may suggest new methods of accomplishing work within a school.

Appendix G

Post-intervention Combined School Survey and
School System Description-Evaluation Questionnaire

SCHOOL FEEDBACK SURVEY

1976

Organization Development in Schools Project

An Experimental Study
carried out for
The National Institute of Education

This is the final questionnaire to be administered for the Organization Development in Schools Project. The survey was prepared at Northwestern University and at the Survey Research Center of The University of Michigan. The research is funded by the National Institute of Education (Grant number NE-G-00-3-0172, Project number 3-0311), Department of Health, Education, and Welfare.

March 1976

GENERAL INSTRUCTIONS

Most of the questions in this survey can be answered by checking one of several numbers that appear on a scale to the right of each item. For each question, please choose the one number that best matches the description of how you feel about the item. For example, if you were asked how much you agree with the statement, "There is always plenty to do on my job" and you feel that you do agree, you would check the number under "agree," like this:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
There is always plenty to do on my job.	[1]	[✓]	[3]	[4]	[5]

Please start filling out this survey on the following page. Throughout the questionnaire there will be directions for you in the boxes. Read the directions and indicate your answers to questions by putting a check mark in the bracketed numbers under the appropriate answers. Please read all the answers carefully before responding. Answer as many questions as possible. Though some of them may not apply to you in particular, we would appreciate it if you would attempt to answer all of the questions.

GO RIGHT ON TO PART I, NEXT PAGE . . .

PART I

This section consists of a number of statements concerning how you solve problems and make changes in your school.

> THE FOLLOWING ARE STATEMENTS THAT MAY OR MAY NOT DESCRIBE YOUR SCHOOL SITUATION. HOW MUCH DO YOU AGREE OR DISAGREE WITH EACH STATEMENT?

	Strongly Agree	Agree	Mildly Agree	Mildly Disagree	Disagree	Strongly Disagree	
1. School problems and needs have been carefully analyzed in terms of their basic reasons and causes.	[1]	[2]	[3]	[4]	[5]	[6]	1:8
2. Faculty meetings and committees have not been utilized effectively for the identification of specific school problems.	[1]	[2]	[3]	[4]	[5]	[6]	1:9
3. In this school, faculty members are given sufficient opportunity to discuss and define school goals.	[1]	[2]	[3]	[4]	[5]	[6]	1:10
4. The administration supports and encourages faculty in developing new teaching practices.	[1]	[2]	[3]	[4]	[5]	[6]	1:11
5. Meetings and group sessions are regularly conducted so faculty members can solve problems as a team.	[1]	[2]	[3]	[4]	[5]	[6]	1:12
6. Very few faculty members participate in solving problems and identifying new alternatives.	[1]	[2]	[3]	[4]	[5]	[6]	1:13
7. Many of the people in this school are not keeping abreast of the changes and innovations that are occurring in education.	[1]	[2]	[3]	[4]	[5]	[6]	1:14
8. There has been insufficient communication across grade levels concerning changes that are needed in our educational program.	[1]	[2]	[3]	[4]	[5]	[6]	1:15
9. Faculty members have been provided with sufficient opportunity to discuss new ideas for change with teachers from other schools in this district.	[1]	[2]	[3]	[4]	[5]	[6]	1:16
10. Information about proposed changes more often flows down (than up) the organizational hierarchy in this school district.	[1]	[2]	[3]	[4]	[5]	[6]	1:17
11. Decisions get "hung up" in committees in this school and district.	[1]	[2]	[3]	[4]	[5]	[6]	1:18
12. Decisions made by this faculty are sometimes ignored or reversed by the administration.	[1]	[2]	[3]	[4]	[5]	[6]	1:19
13. It takes an excessive amount of time to get new ideas approved in this district.	[1]	[2]	[3]	[4]	[5]	[6]	1:20
14. Faculty members have often disliked many of the changes made in this school.	[1]	[2]	[3]	[4]	[5]	[6]	1:21
15. Ideas, solutions, and changes preferred by the district administration are generally consistent with those preferred by the faculty.	[1]	[2]	[3]	[4]	[5]	[6]	1:22
16. New programs adopted in this school often are not tailored to the problems we have.	[1]	[2]	[3]	[4]	[5]	[6]	1:23
17. Ideas for change that are presented and promoted by faculty members are rarely implemented.	[1]	[2]	[3]	[4]	[5]	[6]	1:24
18. The manner in which changes are made in this school sometimes creates problems for the teacher.	[1]	[2]	[3]	[4]	[5]	[6]	1:25

	Strongly Agree	Agree	Mildly Agree	Mildly Disagree	Disagree	Strongly Disagree	
19. There has been good communication between the faculty and the principal concerning the success or failure of new programs.	[1]	[2]	[3]	[4]	[5]	[6]	1:26
20. Any problems caused by new programs are effectively dealt with.	[1]	[2]	[3]	[4]	[5]	[6]	1:27
21. Attempts have been made, either formally or informally, to evaluate the effectiveness of new programs.	[1]	[2]	[3]	[4]	[5]	[6]	1:28
22. Attempts to change or innovate in this school have not had much effect on this school's actual performance.	[1]	[2]	[3]	[4]	[5]	[6]	1:29
23. For one reason or another, new programs and innovations are often discontinued.	[1]	[2]	[3]	[4]	[5]	[6]	1:30

PART II

This section consists of questions about your job, how things are done in your school, how you feel about things here, how much influence you and others have in decisions, and the goals of your school. Please follow the directions given in the boxes at the beginning of each subsection.

LISTED BELOW ARE A NUMBER OF DECISIONS COMMONLY MADE IN SCHOOL SYSTEMS. PLEASE INDICATE HOW FREQUENTLY YOU ACTUALLY PARTICIPATE IN THESE DECISIONS AND HOW FREQUENTLY YOU FEEL YOU SHOULD PARTICIPATE IN THEM.

	ACTUALLY PARTICIPATE					SHOULD PARTICIPATE					
1:31	Never	Seldom	Sometimes	Often	Always	Never	Seldom	Sometimes	Often	Always	1:43
1. Hiring new professional personnel.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
2. Selecting specific instructional texts.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
3. Resolving learning problems of individual students.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
4. Determining appropriate instructional methods and techniques.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
5. Establishing general instructional policies.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
6. Establishing classroom disciplinary policies.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
7. Planning school budgets.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
8. Determining specific professional assignments.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
9. Resolving employee grievances.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
10. Planning new buildings and facilities.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
11. Resolving problems with community groups.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
12. Determining professional salaries.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
1:42											1:54

THE FOLLOWING STATEMENTS MAY OR MAY NOT DESCRIBE YOUR JOB AND YOUR SCHOOL. HOW STRONGLY DO YOU AGREE OR DISAGREE WITH EACH STATEMENT?

	Strongly Agree	Agree	Mildly Agree	Mildly Disagree	Disagree	Strongly Disagree	
1. I look forward to being with the people in my faculty each day.	[1]	[2]	[3]	[4]	[5]	[6]	1:55
2. I would describe my job as being routine.	[1]	[2]	[3]	[4]	[5]	[6]	1:56
3. When faced with a situation that is new and not covered by existing procedures, I feel free to adapt to the requirements of the situation.	[1]	[2]	[3]	[4]	[5]	[6]	1:57
4. We have procedures to follow in dealing with most situations that might arise in this school.	[1]	[2]	[3]	[4]	[5]	[6]	1:58
5. How things are done around here is left pretty much up to the person doing the work.	[1]	[2]	[3]	[4]	[5]	[6]	1:59
6. Even small matters have to be referred to someone higher up for a final answer.	[1]	[2]	[3]	[4]	[5]	[6]	1:60
7. Following established rules and procedures, even when they don't seem appropriate to the situation, is the safest course to follow around here.	[1]	[2]	[3]	[4]	[5]	[6]	1:61
8. A person who wants to make his or her own decisions would be quickly discouraged here.	[1]	[2]	[3]	[4]	[5]	[6]	1:62
9. I feel I am really a part of my school.	[1]	[2]	[3]	[4]	[5]	[6]	1:63
10. When faced with new demands in my work, I am able to get additional information that I need.	[1]	[2]	[3]	[4]	[5]	[6]	1:64
11. Most jobs here have something new happening every day.	[1]	[2]	[3]	[4]	[5]	[6]	1:65
12. The administration adheres to established rules and regulations in dealing with the teaching staff.	[1]	[2]	[3]	[4]	[5]	[6]	1:66
13. I always have the same areas of responsibility in performing my job.	[1]	[2]	[3]	[4]	[5]	[6]	1:67
14. I have the necessary authority to make changes in how I do my job when situations require it.	[1]	[2]	[3]	[4]	[5]	[6]	1:68
15. Whenever we have a problem, we are supposed to go through formal channels for an answer.	[1]	[2]	[3]	[4]	[5]	[6]	1:69
16. I do not have confidence and trust in the people I work with.	[1]	[2]	[3]	[4]	[5]	[6]	1:70
17. One thing people like around here is the variety in their work.	[1]	[2]	[3]	[4]	[5]	[6]	1:71
18. Most people here make their own rules on the job.	[1]	[2]	[3]	[4]	[5]	[6]	1:72
19. Everyone in this school has a clearly defined job to do.	[1]	[2]	[3]	[4]	[5]	[6]	1:73

HERE IS A LIST OF GOALS THAT SCHOOLS ARE OFTEN CONCERNED WITH. INDICATE HOW MUCH EACH GOAL IS STRESSED IN YOUR SCHOOL, AND HOW EFFECTIVE YOUR SCHOOL IS IN ACHIEVING THE GOAL.

	Receives How Much Attention and Resources?					How Effective?					
2:8	None	Little	Some	Considerable	Major	Not at all	Barely	Somewhat	Effective	Extremely	2:18
1. To develop a highly qualified professional staff.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
2. To implement a comprehensive and integrated instructional program.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
3. To provide a positive and supportive school environment and atmosphere for students.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
4. To provide on-going evaluation of school programs for purposes of program modification and development.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
5. To experiment with promising educational innovations.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
6. To be responsive to the needs, concerns and desires of the community.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
7. To communicate to the public the objectives, operations and results of the educational programs.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
8. To promote educational achievement of minority students.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
9. To coordinate school activities with those of relevant community groups, agencies, and organizations.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
10. To lessen disciplinary problems.	[1]	[2]	[3]	[4]	[5]	[1]	[2]	[3]	[4]	[5]	
2:17											2:27

MOST PEOPLE OCCASIONALLY FEEL BOTHERED BY CERTAIN KINDS OF THINGS IN THEIR WORK. PLEASE INDICATE HOW FREQUENTLY YOU ARE BOTHERED BY EACH OF THE FOLLOWING FEELINGS.

	Never	Rarely	Sometimes	Rather often	Nearly all of the time	
1. Feeling that you have too little authority to carry out the responsibilities assigned to you.	[1]	[2]	[3]	[4]	[5]	2:28
2. Being unclear on just what the scope and responsibilities of your job are.	[1]	[2]	[3]	[4]	[5]	2:29
3. The fact that you can't get information needed to carry out your job.	[1]	[2]	[3]	[4]	[5]	2:30
4. Feeling unable to influence your immediate superior's decisions and actions that affect you.	[1]	[2]	[3]	[4]	[5]	2:31
5. Not knowing just what the people you work with expect of you.	[1]	[2]	[3]	[4]	[5]	2:32
6. Thinking that the amount of work you have to do may interfere with how well it gets done.	[1]	[2]	[3]	[4]	[5]	2:33
7. Feeling that you don't have time to do everything others ask of you.	[1]	[2]	[3]	[4]	[5]	2:34
8. Feeling that you don't seem to have enough time to get things done.	[1]	[2]	[3]	[4]	[5]	2:35

INDICATE YOUR DEGREE OF SATISFACTION WITH EACH OF THE FOLLOWING ASPECTS OF YOUR JOB.

	Very Dissatisfied	Dissatisfied	Mildly Dissatisfied	Mildly Satisfied	Satisfied	Very Satisfied	
1. The amount of supervision you receive.	[1]	[2]	[3]	[4]	[5]	[6]	2:36
2. The authority connected with you job.	[1]	[2]	[3]	[4]	[5]	[6]	2:37
3. The feeling of self-esteem or self-respect you get from being in your job.	[1]	[2]	[3]	[4]	[5]	[6]	2:38
4. The opportunity for personal growth and development in your job.	[1]	[2]	[3]	[4]	[5]	[6]	2:39
5. The opportunity for independent thought and action in your job.	[1]	[2]	[3]	[4]	[5]	[6]	2:40
6. The feeling of worthwhile accomplishment in your job.	[1]	[2]	[3]	[4]	[5]	[6]	2:41
7. The opportunity, in your job, for participation in the determination of methods, procedures and goals.	[1]	[2]	[3]	[4]	[5]	[6]	2:42
8. The amount of respect and fair treatment you receive from your superiors.	[1]	[2]	[3]	[4]	[5]	[6]	2:43
9. The feeling of being informed in your job.	[1]	[2]	[3]	[4]	[5]	[6]	2:44
10. Your present job when you consider the expectations you had when you took the job.	[1]	[2]	[3]	[4]	[5]	[6]	2:45

BELOW IS A LIST OF GROUPS THAT MIGHT INFLUENCE VARIOUS ACTIVITIES IN YOUR SCHOOL. INDICATE HOW MUCH INFLUENCE EACH GROUP HAS ON POLICIES AND PROGRAMS IN THIS SCHOOL AND ON THE THINGS YOU DO IN YOUR JOB.

		Influence on Policy and Programs						Influence over Your Job						
	2:46	None	Little	Some	Substantial	Very Strong	Not Applicable	None	Little	Some	Substantial	Very Strong	Not Applicable	2:56
1. Students		[1]	[2]	[3]	[4]	[5]	[9]	[1]	[2]	[3]	[4]	[5]	[9]	
2. Teachers		[1]	[2]	[3]	[4]	[5]	[9]	[1]	[2]	[3]	[4]	[5]	[9]	
3. Principals		[1]	[2]	[3]	[4]	[5]	[9]	[1]	[2]	[3]	[4]	[5]	[9]	
4. Central office		[1]	[2]	[3]	[4]	[5]	[9]	[1]	[2]	[3]	[4]	[5]	[9]	
5. Board of education		[1]	[2]	[3]	[4]	[5]	[9]	[1]	[2]	[3]	[4]	[5]	[9]	
6. Parents		[1]	[2]	[3]	[4]	[5]	[9]	[1]	[2]	[3]	[4]	[5]	[9]	
7. The AFT and affiliates		[1]	[2]	[3]	[4]	[5]	[9]	[1]	[2]	[3]	[4]	[5]	[9]	
8. The state government		[1]	[2]	[3]	[4]	[5]	[9]	[1]	[2]	[3]	[4]	[5]	[9]	
9. The federal government		[1]	[2]	[3]	[4]	[5]	[9]	[1]	[2]	[3]	[4]	[5]	[9]	
10. Community agencies (e.g., police, parks, city government, etc.)		[1]	[2]	[3]	[4]	[5]	[9]	[1]	[2]	[3]	[4]	[5]	[9]	
	2:55													2:65

PART III

This section consists of a number of statements concerning your attitudes and opinions about various aspects of your work situation. Please read each statement carefully and decide how you feel about it. You might agree with some statements and disagree with others; and you may be undecided about some. When answering, keep in mind the experiences you have had working in this school. Please mark the "Not Applicable" box only if a statement is not relevant to your school.

THE FOLLOWING ARE STATEMENTS THAT MAY OR MAY NOT DESCRIBE YOUR SCHOOL SITUATION. HOW MUCH DO YOU AGREE OR DISAGREE WITH EACH STATEMENT?

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Not Applicable	
1. This school does a good job of preparing students to be responsible citizens.	[1]	[2]	[3]	[4]	[5]	[6]	2:66
2. The parents of individual students exert too great an influence on the professional work of this school.	[1]	[2]	[3]	[4]	[5]	[6]	2:67
3. Teachers in this school are genuinely interested in helping each other with teaching problems.	[1]	[2]	[3]	[4]	[5]	[6]	2:68
4. In general, the parents of the students here are interested in helping us educate their children.	[1]	[2]	[3]	[4]	[5]	[6]	2:69
5. Many people here are more concerned with their own personal interests than with the overall welfare of the school.	[1]	[2]	[3]	[4]	[5]	[6]	2:70
6. The learning experiences in our school are diverse enough to accommodate the needs of most children.	[1]	[2]	[3]	[4]	[5]	[6]	2:71
7. Parent organizations exert too great an influence on the professional work of this school.	[1]	[2]	[3]	[4]	[5]	[6]	2:72
8. People in this school provide one another with great support and encouragement.	[1]	[2]	[3]	[4]	[5]	[6]	2:73
9. The procedures for judging my performance are helpful to me in improving my work.	[1]	[2]	[3]	[4]	[5]	[6]	2:74
10. District administrators fail to concern themselves with important educational matters faced by the faculty.	[1]	[2]	[3]	[4]	[5]	[6]	2:75
11. Most of the meetings I am required to attend here are worthwhile.	[1]	[2]	[3]	[4]	[5]	[6]	2:76
12. The quality of supplementary materials for student use here needs to be greatly improved.	[1]	[2]	[3]	[4]	[5]	[6]	2:77
13. Our instructional program enables students to work at the pace that is best for them.	[1]	[2]	[3]	[4]	[5]	[6]	2:78
14. The administration usually tries to take action on faculty complaints.	[1]	[2]	[3]	[4]	[5]	[6]	3:8
15. In so far as they affect me, the decisions made by the central office administration are fair and equitable.	[1]	[2]	[3]	[4]	[5]	[6]	3:9
16. Our committee efforts and reports are frequently ignored.	[1]	[2]	[3]	[4]	[5]	[6]	3:10
17. The instructional materials provided for my use here are very satisfactory.	[1]	[2]	[3]	[4]	[5]	[6]	3:11

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Not Applicable	
18. The work of bilingual instructors in this district is well coordinated with the work of classroom teachers.	[1]	[2]	[3]	[4]	[5]	[6]	3:12
19. There are effective channels of communication between the faculty and the school board.	[1]	[2]	[3]	[4]	[5]	[6]	3:13
20. In my opinion, adequate educational standards are being upheld in this school.	[1]	[2]	[3]	[4]	[5]	[6]	3:14
21. Our student achievement and aptitude testing programs are insensitive to the cultural differences among our students.	[1]	[2]	[3]	[4]	[5]	[6]	3:15
22. There are many cliques or groups in this school that create a non-professional atmosphere.	[1]	[2]	[3]	[4]	[5]	[6]	3:16
23. A teacher in this school can develop a sense of professional competence.	[1]	[2]	[3]	[4]	[5]	[6]	3:17
24. We have adequate facilities in which students can work individually or in groups.	[1]	[2]	[3]	[4]	[5]	[6]	3:18
25. I am required to do too much administrative paper work (attendance reports, tardy slips, statistical reports, etc.).	[1]	[2]	[3]	[4]	[5]	[6]	3:19
26. I'm essentially in agreement with the school's policies on the placement of students into instructional levels, special programs, etc..	[1]	[2]	[3]	[4]	[5]	[6]	3:20
27. Effective curriculum assistance is provided classroom teachers in this school.	[1]	[2]	[3]	[4]	[5]	[6]	3:21
28. The superintendent and his/her assistants seem to show a real interest in obtaining our ideas and suggestions.	[1]	[2]	[3]	[4]	[5]	[6]	3:22
29. My principal fails to serve as a communication link between the teachers and the district administration and the school board.	[1]	[2]	[3]	[4]	[5]	[6]	3:23
30. Teachers and other professional personnel in this school freely share ideas and materials.	[1]	[2]	[3]	[4]	[5]	[6]	3:24
31. We lack satisfactory procedures in this district for evaluating student progress (e.g., achievement tests).	[1]	[2]	[3]	[4]	[5]	[6]	3:25
32. Certain community groups exert too much influence on the professional work of this school.	[1]	[2]	[3]	[4]	[5]	[6]	3:26
33. I do not understand how my work performance is evaluated.	[1]	[2]	[3]	[4]	[5]	[6]	3:27
34. District administrators seem to take teachers' viewpoints into account when making decisions affecting the teaching staff.	[1]	[2]	[3]	[4]	[5]	[6]	3:28
35. I have sufficient supplies for my work.	[1]	[2]	[3]	[4]	[5]	[6]	3:29
36. This district has not given sufficient consideration to the problems posed by socio-economic differences among students.	[1]	[2]	[3]	[4]	[5]	[6]	3:30
37. This school system effectively provides for the needs of students who speak a language other than English.	[1]	[2]	[3]	[4]	[5]	[6]	3:31
38. It is easy to appeal decisions made in this district which affect me adversely.	[1]	[2]	[3]	[4]	[5]	[6]	3:32
39. The work of learning disability specialists in this district is well coordinated with the work of classroom teachers.	[1]	[2]	[3]	[4]	[5]	[6]	3:33

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Not Applicable	
40. Insufficient attention is directed toward developing the basic reading and writing skills of our students.	[1]	[2]	[3]	[4]	[5]	[6]	3:34
41. I am asked to spend too much time in meetings.	[1]	[2]	[3]	[4]	[5]	[6]	3:35
42. Relations between the parents of students and the staff of this school need to be improved.	[1]	[2]	[3]	[4]	[5]	[6]	3:36
43. I am provided with useful information through our student aptitude and achievement testing programs.	[1]	[2]	[3]	[4]	[5]	[6]	3:37
44. I'm rarely told whether or not I'm doing good work.	[1]	[2]	[3]	[4]	[5]	[6]	3:38
45. Some of the faculty in this school think they run the place.	[1]	[2]	[3]	[4]	[5]	[6]	3:39
46. I am required to perform too many non-professional duties here (playground, hall, stairs, lunchroom and study hall duties).	[1]	[2]	[3]	[4]	[5]	[6]	3:40
47. There are adequate space and equipment for carrying out my work–including desk space, drawers, bookshelves and the like.	[1]	[2]	[3]	[4]	[5]	[6]	3:41
48. Most of the students I work with are placed at the instructional level that is best for them.	[1]	[2]	[3]	[4]	[5]	[6]	3:42
49. My principal usually "goes to bat" for us with his/her superiors.	[1]	[2]	[3]	[4]	[5]	[6]	3:43
50. Our principal sometimes fails to concern himself/herself with important educational matters faced by the faculty.	[1]	[2]	[3]	[4]	[5]	[6]	3:44
51. We are seldom kept informed about what the school board and top administration are thinking.	[1]	[2]	[3]	[4]	[5]	[6]	3:45
52. Effective remedial help is available to any of my students who need it.	[1]	[2]	[3]	[4]	[5]	[6]	3:46
53. We receive effective assistance in diagnosing the learning difficulties of individual pupils.	[1]	[2]	[3]	[4]	[5]	[6]	3:47
54. My principal backs me up in my dealings with parents.	[1]	[2]	[3]	[4]	[5]	[6]	3:48
55. I receive sufficient clerical assistance to do my job effectively.	[1]	[2]	[3]	[4]	[5]	[6]	3:49
56. Student absences are excessive in this school.	[1]	[2]	[3]	[4]	[5]	[6]	3:50
57. Adequate facilities are available for my use during off periods for grading papers, meeting with students and parents, and the like.	[1]	[2]	[3]	[4]	[5]	[6]	3:51
58. We should re-examine our tracking and ability-grouping policies.	[1]	[2]	[3]	[4]	[5]	[6]	3:52
59. The students I work with present an unusual amount of discipline problems.	[1]	[2]	[3]	[4]	[5]	[6]	3:53
60. Psychological services generally meet the needs of our students.	[1]	[2]	[3]	[4]	[5]	[6]	3:54
61. Too many students here seem more interested in getting grades than in learning.	[1]	[2]	[3]	[4]	[5]	[6]	3:55
62. Filling in this survey is a poor way of finding out how I feel about my work in this district.	[1]	[2]	[3]	[4]	[5]	[6]	3:56
63. Some good may come out of filling in this survey.	[1]	[2]	[3]	[4]	[5]	[6]	3:57

PEOPLE WHO WORK IN SCHOOLS OFTEN FIND IT IMPORTANT OR NECESSARY TO CONFER WITH SOME OTHER MEMBERS OF THE SCHOOL STAFF IN ORDER TO CARRY OUT THEIR OWN RESPONSIBILITIES ADEQUATELY. PLEASE SELECT THE FIVE INDIVIDUALS WHO WORK IN THIS SCHOOL (EITHER PART TIME OR FULL TIME) WITH WHOM YOU HAVE FOUND IT IS MOST IMPORTANT THAT YOU CONFER.

-What are the names of these people?

-What are their job titles (e.g., first grade teacher, history teacher, school secretary, speech therapist, principal, etc.)?

-How often, in the average month, do you confer with each of these persons (simply estimate the number of times)?

NAME	JOB TITLE	AVERAGE FREQUENCY OF CONFERRING
1. ____________	____________	about ______ times per month
2. ____________	____________	about ______ times per month
3. ____________	____________	about ______ times per month
4. ____________	____________	about ______ times per month
5. ____________	____________	about ______ times per month

The following information is necessary for the proper statistical analysis of the data you have provided. This demographic information will allow (1) comparisons to be made among different groups of teachers and (2) measurement of any changes which have occurred since the last questionnaire administration. All of your responses are strictly confidential: individual responses will not be seen by anyone in the district. We appreciate your help in providing this information.

1. Name: ______________________

3:58-63

2. Position: ______________________
(e.g., first grade teacher, reading specialist, etc.)

3:64-66

3. Number of years of education completed (please circle)

College				Graduate			
13	14	15	16	17	18	19	20+

3:67-68

4. How long have you worked at this school? (include the current school year)

______ years 3:69-70

5. How many years of experience have you had working in school? (include the current school year)

______ years 3:71-72

6. Year of birth: 19 ______ 3:73-74

Thank you very much for completing this survey. Please use the other side of this page if you have any comments on this survey or on the organization development program.

Appendix H

Sample Post-intervention School Feedback Form

MATERIALS AND EQUIPMENT

	Percent Favorable Response 0 50 100	School ○ %UF	School ○ MEAN	District △ %UF	District △ MEAN	
OVERALL 1976						
12. Quality of Supplementary Material						1976
						1975
17. Instructional Materials						1976
						1975
35. Quantity of Supplies						1976
						1975

		Favorable Response
12.	The quality of supplementary materials for student use here needs to be greatly improved.	D
17.	The instructional materials provided for my use here are very satisfactory.	A
35.	I have sufficient supplies for my work.	A

BUILDING AND FACILITIES

	Percent Favorable Response 0 50 100	School ○ %UF	School ○ MEAN	District △ %UF	District △ MEAN	
OVERALL 1976						
24. Facilities For Student Work						1976
						1975
47. Work Space and Equipment						1976
						1975
57. Facilities For Use During Off Periods						1976
						1975

		Favorable Response
24.	We have adequate facilities in which students can work individually or in groups.	A
47.	There are adequate space and equipment for carrying out my work-including desk space, drawers, bookshelves and the like.	A
57.	Adequate facilities are available for my use during off periods for grading papers, meeting with students and parents, and the like.	A

Appendix I

A SURVEY FEEDBACK ORGANIZATION DEVELOPMENT PROGRAM FOR EDUCATIONAL SYSTEMS*

a paper prepared
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A SURVEY FEEDBACK ORGANIZATION DEVELOPMENT PROGRAM FOR EDUCATIONAL SYSTEMS

A major objective of survey feedback, like other organization development (OD) methods, is to bring about lasting and continuing change and improvement in organizations. Unfortunately, research has suggested that these data based strategies often fail to bring about enduring changes in formal social systems. This less than successful "track record" is not unanticipated in that there is relatively little evidence that any type of OD program, including person-centered and task-oriented approaches, effectively produce large-scale and long-term changes in organizations. Nevertheless, one would expect that survey feedback techniques have the potential for creating change in that survey data can help to identify problems and point the way toward improvement. The problem is that this problem-identification capacity might be one of the only functional consequences of feeding back data. Clearly, survey feedback must be used in conjunction with other OD components if the change producing potential of survey data is to be realized.

The purpose of this paper is to discuss some of the limitations of interventions based solely on data feedback, to describe an intervention which combines survey feedback with complementary OD components, and to present a process evaluation of such a multiple-component OD intervention. The intervention to be discussed and evaluated in this paper was designed expressly for educational systems.

SOME LIMITATIONS OF TRADITIONAL SURVEY FEEDBACK INTERVENTIONS

The inherent limitations of traditional interventions which rely exclusively on survey feedback have been documented by a number of researchers (Miles et al., 1969; Coughlan et al., 1972; Nadler, 1975). Survey feedback seems to have four limitations, either implicitly or explicitly noted in previous reviews, which inhibit the effectiveness of this approach to planned organizational change. First, survey feedback programs tend to be temporary in nature--they begin when the external agent enters the system and end when the agent leaves. This problem is in part related to a second characteristic of many data-based efforts. Survey feedback interventions, often conducted and directed by agents external to the target organization, leave members of the focal system with neither the skills nor the training to use feedback techniques on their own. A third problem is that survey feedback is useful only in terms of the first stage of the decision making or change process and fails to provide organizational members with problem solving and change implementation tools. Fourth, interventions often fail to establish explicit structural arrangements within which problems identified by survey data can be dealt with on an ongoing basis.

These inter-related problems are sufficiently serious to ensure that the mere feeding-back of survey data will bring about minimal change in organizations. The temporary status of this type of intervention creates, at best, minor perturbations in a target organization. Open systems tend to strive for consistency and stability (Katz and Kahn, 1966) and a short-lived disturbance is unlikely to permantly change an organization. Planned change often has been described in terms of "unfreezing" an organization and "refreezing" it in a renewed state (Lewin, 1969). In the absence of complementary OD components, the feeding back of questionnaire data may not be sufficiently powerful to break down existing norms, practices, and structures. Even if new information provided by the feedback effort successfully unfreezes a system, it is unlikely that a couple of meetings for data discussion will produce significant changes in the organizations--things should go back to normal.

The minor and temporary impact of survey feedback is, in part, a function of the way this OD component is used by interventionists. In many cases, the external change agents or in-house OD specialists assume responsibility for feeding back the data and leading group discussions on the findings. Members of the target system or subsystem participate in the process, but this participation is often more passive than active. They develop neither the theoretical knowledge nor the practical skills to use the data on their own. When the external agents leave the system, the momentum started by the feedback process dies down and the temporary status of the intervention is confirmed. Members of the client system are unable to continue the process even if they want to.

The third barrier to the long-term change potential of survey feedback interventions is related to the nature of the change process. Organizational change commonly is conceptualized as a multi-stage process (Rogers and Shoemaker, 1973; Zaltman et. al., 1974). The first stage of the decision making or change process often invloves the identification of problems or the need for change. It is at this stage that survey feedback is most relevant. Change, however, involves more than the mere identification of problems--change alternatives must be identified, accepted, and installed. Even if discussions of survey data produce solutions and new ideas for alleviating identified problems, it is still uncertain that these solutions will be implemented. If discussions of the data lead to solutions which are never implemented, organizational members are likely to become disenchanted and prone to abandon the change strategy. Again, the temporary nature of feedback interventions is reinforced.

A fourth problem with feedback interventions is their failure to establish change-supporting structures in the client system (Miles et al., 1969). Survey feedback is a tool which is used within the context of an organizational structure. In many cases, the existing structural arrangements of organizations are inappropriate for dealing with survey data. The effective use of survey data may require special committee structures, new communication networks, revised role expectations, and increased formalization (the use of documents). Without such structural arrangements, organizational members may be unable to get through or past even the first stage of the change process. When uncertainty is high and procedures are lacking, members may find it convenient or necessary to ignore the data and terminate the change effort.

STRENGTHENING THE IMPACT OF FEEDBACK INTERVENTIONS

There are various things that might be done to increase the change-producing potential of feedback interventions. The major problem to be counter-acted is the tendency for OD interventions to be temporary in terms of duration and insignificant in terms of impact. This problem might best be approached by dealing with the other three problems delineated above. It is possible that change skills can be developed within the target system, interventions can be aimed at the entire change process rather than merely at the initial stages, and change-supporting structures can be established in organizations.

First, change agents can focus their efforts on transferring their skills to members of the client organizations. Survey feedback methods are thought to be more easily mastered and practiced than are other OD techniques such as sensitivity training. It is possible that, given a few days of intensive training, members of certain organizations can learn the basic skills needed to conduct survey feedback meetings. An external agent or in-house OD specialist may be able to transfer some feedback skills to members of the client system in about the same amount of time it would take to lead a series of feedback meetings. The difference is that when the change agent leaves the system as a trainer, organizational members are left with the capabilities needed to continue the renewal effort.

Training sessions could be conducted to familiarize elected group leaders with the basics of organizational change. Ideally, these training programs should cover more than the skills and knowledge required to interpret and feedback survey data. Training might focus on leadership skills, problem solving processes, communication techniques, the problems of implementing change, and conflict resolution skills. Additionally, other members of the client system might be trained to monitor and evaluate the change program. Given adequate training, members of the organization would ideally gain the ability not only to sustain the change effort but also to correct the strategy as needed.

Data feedback and discussion is relevant only to the initial stages of the change process and training programs could focus equal attention on subsequent stages. This process-oriented strategy would help to overcome the third barrier to sustained change in organizations--that is, the tendency for the renewal effort to break down after the problem identification or solution generation stage. The design of the training could be based on any of the various conceptualizations of the innovation decision making process in organizations. One such model, the authority innovation decision process, outlines the way in which changes starting from the tip of an organization are initiated and implemented (Rogers and Shoemaker, 1971; Zaltman et. al., 1973; Hage and Aiken, 1970). Another model, the collective innovation decision process, delineates the steps by which changes are made collaboratively or from the bottom up (Rogers and Shoemaker, 1971; Coughlan and Cooke, 1974).

The process of collective decision making is particularly important for educational systems. Many of the causes of organizational rigidity cited by Hawley (1972) and others and of technological and professional retardation cited by Dreeben (1970) seem to be tied to the absence of collective decision mechanisms. An OD training program for educational systems, therefore, might address itself to the stages of the collective process. These stages as we conceptualize them include (1) evaluation-- problem identification; (2) solution generation; (3) internal diffusion--communication of possible solutions throughout the system; (4) legitimation--approval of proposed changes, when necessary, by formal leaders; (5) adoption-- acceptance of and planning for the change; (6) implementation--installantion of the idea; and (7) routinization--the sustained implementation and evaluation of the change (Coughlan and Cooke, 1974).

These seven stages suggest the need for training in a number of areas. As noted above, data interpretation and feedback skills are important for the evaluation or problem identification stage. Skills in group problem solving and leadership seem germane to the solution generation subprocess. Training in communication techniques--and the use of special documents for disseminating information--would be appropriate for the internal diffusion stage. Organizational members might benefit from knowledge on resistance to change in coping with the adoption and implementation stages. Evaluation skills are again appropriate at the point of routinization.

Given a training program which transfers skills of this type, it becomes reasonable--possibly necessary--to provide a structural framework within which these skills can be applied. Structural arrangements should emerge to provide a framework within which organizational members can work through each stage of the process and move from one stage to the next. An external agent may prescribe modifications in the existing authority structure to provide a participative foundation for feedback and problem solving activities (and the performance of these problem solving activities could further "democratize" the structure). Alternatively, a new structure, complementary to existing authority arrangements, might be prescribed and superimposed over existing organizational configurations.

The superimposition of a complementary collective decision making structure seems particularly appropriate for educational systems. Like other organizations, educational systems must interact with and respond to the forces in the external environment. The authority structural arrangements found in most schools are designed to react to this environment. However, organizations must also make decisions based on what goes on within the organization--the internal environment (Duncan, 1972). An important component of this internal environment is the technology of the organization. Educational technologies are somewhat uncertain in that cause-effect relations are not always known, different students may respond differently to different teaching methods, results are difficult to measure, etc.. This internal uncertainty calls for decision making structures which can adequately respond to changing and complex situations at the technical level. In most schools, some of this uncertainty is absorbed by individual teachers--that is, by those organizational members who are closest to the technical operation. However, the solutions to many operating problems demand the exchange of information, the pooling of ideas, and the coordinated implementation and evaluation of new programs and procedures.

Collective decision structures, in concept, would provide for technical level problem solving, decision making, and change initiation in educational systems. Such structures might involve committees comprised of teachers led by a faculty member trained in the skills delineated above. The committee configuration could also involve a joint teacher-administrator group to discuss faculty-initiated changes. Special communication techniques and documents--such as problem solving forms--could be used to formalize horizontal and vertical communication. And new role expectations, prescribing specific problem solving responsibilities, could be developed within the client organization. Such structural prescriptions possibly could lead to the emergence of a framework within which skills could be used to move through the collective change process.

These recommendations for strengthening the impact of survey feedback interventions are based on previous experiences with data-based change in schools. The recommendations are a product of, and point towards improvements in, a previous experiment involving a survey feedback--problem solving collective decision (SF-PS-CD) intervention (Coughland and Cooke, 1974). In that d[illegible] the researchers helped to establish faculty problem solving groups

(Program Groups), and teacher-administrator committees to review faculty suggestions and decisions (Review Committees). Elected teachers were designated Program Leaders and were provided with training in survey feedback, problem solving, and leadership skills. The program was evaluated within the context of a modified four group experimental design. It was concluded that the intervention facilitated collective decision making, led to improvements in teachers' work attitudes, and brought about a number of faculty-initiated changes in the experimental schools. Additionally, the collective decision intervention was deemed to be superior to a survey feedback "only" program used in a subset of the control schools.

The intervention to be discussed in the remainder of this paper is a modified and expanded version of the earlier SF-PS-CD program. This follow-up study, sponsored by the National Institute of Education, was initiated in response to two of the shortcomings of the previous research. First, the intervention was implemented at the building level the first time and it seemed necessary to try a district-wide intervention. Second, the earlier study focused on product evaluation and process evaluation was minimized to avoid contamination. Consequently, further research was required to explain how and why the positive results were obtained.

PRESENT INTERVENTION

As a response to these shortcomings the present intervention is a district level program and provides for much more knowledge about the processes and behaviors which take place. It is also based on a more developed model of the change process with a clearer conception of the role of survey feedback. It uses an expanded and more task-oriented survey package.

The focal units of the intervention are problem-solving and collective decision-making groups. There are two such group types: 1) faculty groups in each of the schools and 2) a principal group, consisting of all principals in the district. Each of these groups fill out a survey and are fed back their survey results compared with the average of the results of all other comparable groups in the district. The principal group has no camparison data. Teacher groups are divided into two types: 1) those representing elementary schools and 2) those representing secondary schools, i.e., junior high and high school.

Three surveys are used corresponding to the three types of groups just mentioned. The principal survey and the teacher surveys differ in their content to reflect the different roles of the respondents and in their wording to reflect the differing perspectives of those roles. The secondary survey has more items and general categories than the elementary survey, reflecting the higher complexity present in the secondary situation. All surveys are edited by district members prior to administration. Several changes in and additions to the items have been made to reflect peculiar district situations.

All survey items are tentative descriptions of the respondent's situation which can be answered as Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree, or Not Applicable. Approximately half of the items are negatively worded to control for response bias. Depending on whether the item is negatively or positively worded, levels of the Agree, Disagree responses are collapsed so that the original five point scale (excluding the NA response) are trichotomized to Favorable, Undecided, Unfavorable. The percent of the respondents in the group who answer an item in a way that reflects favorably on their situation is graphed on a grid ranging from 0% to 100%. The percent favorable responses for the district as a whole is also graphed on the same grid to invite comparison between the group and the district-wide response. These comparisons are provided first for each of the categories of items. Comparisons are then made for each of the items in the categories to facilitate the definition of problem areas by the problem-solving groups. The overall category profile for the elementary survey and an item profile for one category are presented in Figure I and Figure II, respectively. Dummy data has been added. Notice that a large amount of additional data has been provided. This also was done to facilitate problem definition, in addition to help to avoid misconstruing the meaning of the percent favorable graph.

The problem-solving and decision-making groups are expected to operate independently of any outside intervention once the process is started. This means that the process of feeding back survey results (including all the explanations necessary to understand the format and interpret the numbers) is to be performed by group members. Many of the subsequent activities needed in the collective decision process are also the responsibility of the program group.

Each group elects two individuals, a leader and a monitor. The leader's task is to feed back the survey data and guide the group through the activities necessary to accomplish the complete change process. The monitor's task is to record observations on the process and progress of the group and to provide the research team and the group itself with the information he or she collects. In addition, the monitor is responsible for recording and phrasing the various statements of the focal problems, and their solutions as generated by the groups and evolved through the entire process. Structured instruments designed to provide data useful to the leader, the research team, and the group as a whole are furnished to the monitors, as well as forms meant for the communication of results at various stages of the process. The leader and monitor roles are viewed as complementary and they need to work as a team. Feedback from the monitor is to be used by the leader and the group to correct behaviors hampering progress along the seven-step change process. Leaders and monitors are trained in the skills thought necessary to accomplish the tasks. For the leaders, this includes practicing feedback techniques, problem-solving and decision-making skills, and group-process skills, in addition to cognitive training on each and some instruction on the theory behind and the structure of the OD program itself. Monitor training includes similar instruction regarding the program, practice in observing group processes, and instruction in the use of the monitoring and communications forms.

A final component of the program consists of a series of overlapping group structures. Basically these structures are created as a vehicle for the legitimation process. In other words, the overlapping group structure provides the integrative link between the new problem-solving and collective decision-making structure and the existing authority structure of the district. The overlapping group structure can also be used as communication and coordinating linkage The total array of overlapping groups are presented in Figure III. A detailed description of the functions and composition of these groups is provided in the Appendix.

FIGURE I.

ELEMENTARY SCHOOL SURVEY -- Profile

Group Profiled: SCHOOL Z

No. in group: 23

LEGEND:

○ School

▲ District Overall

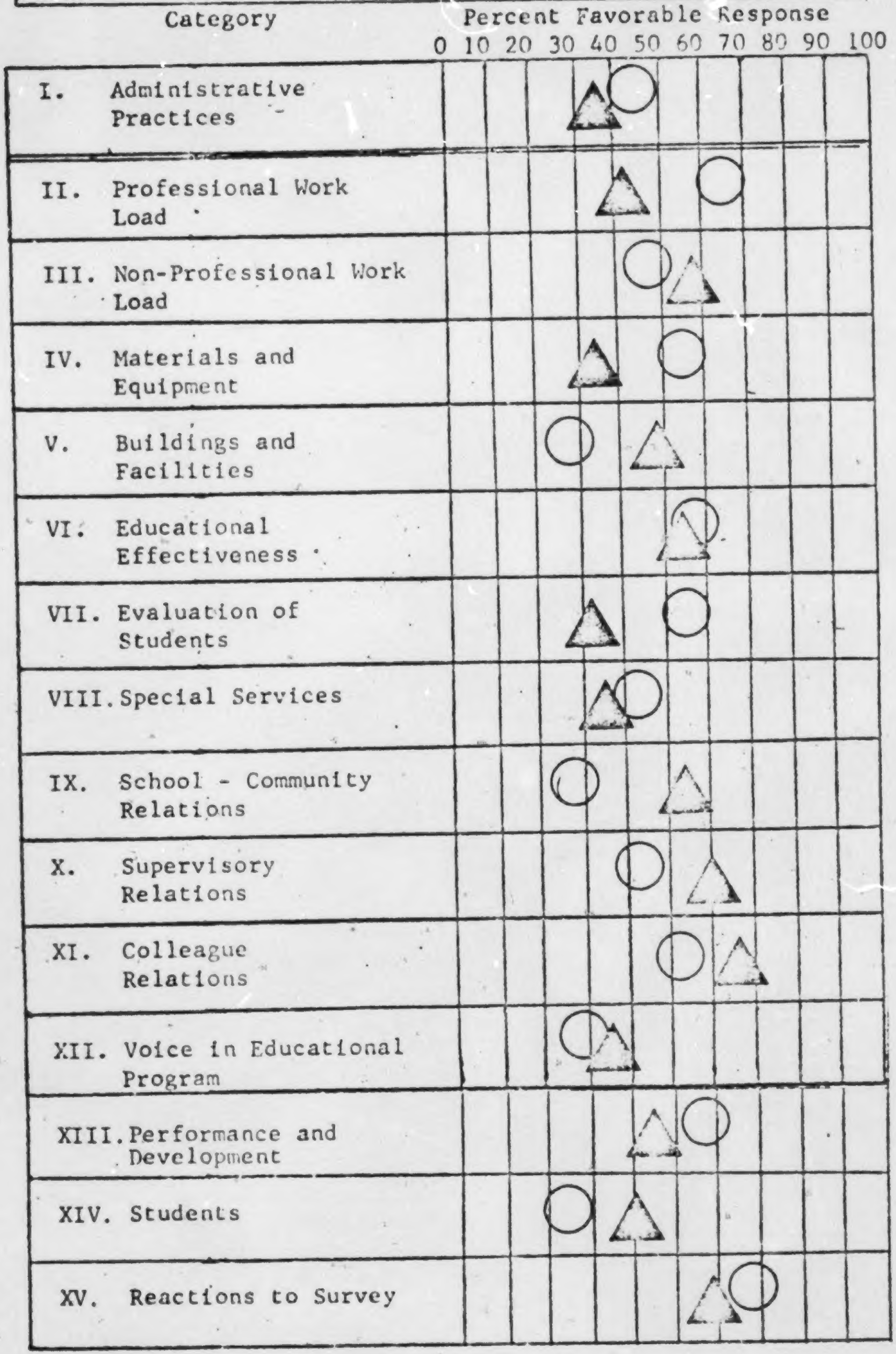
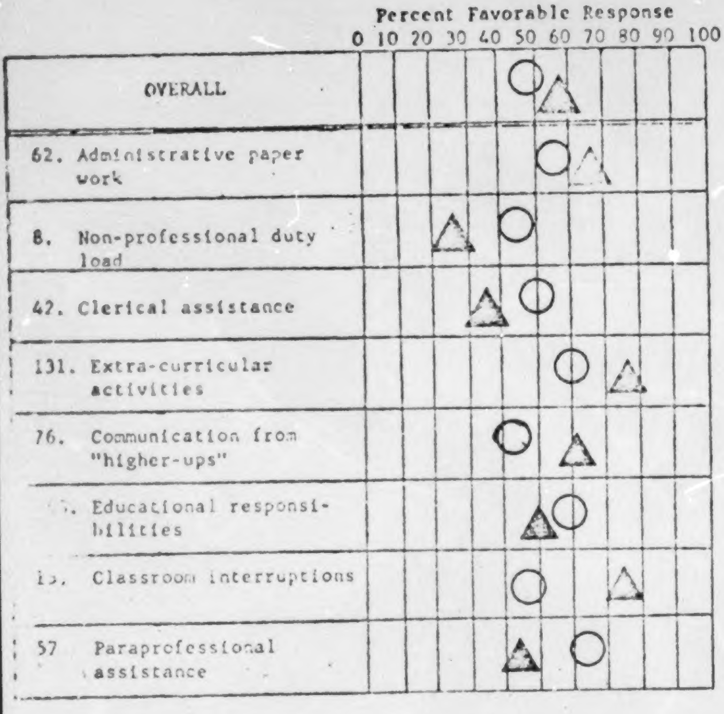


FIGURE II.

CATEGORY III NON-PROFESSIONAL WORK LOAD (ELEMENTARY SCHOOL SURVEY)



School

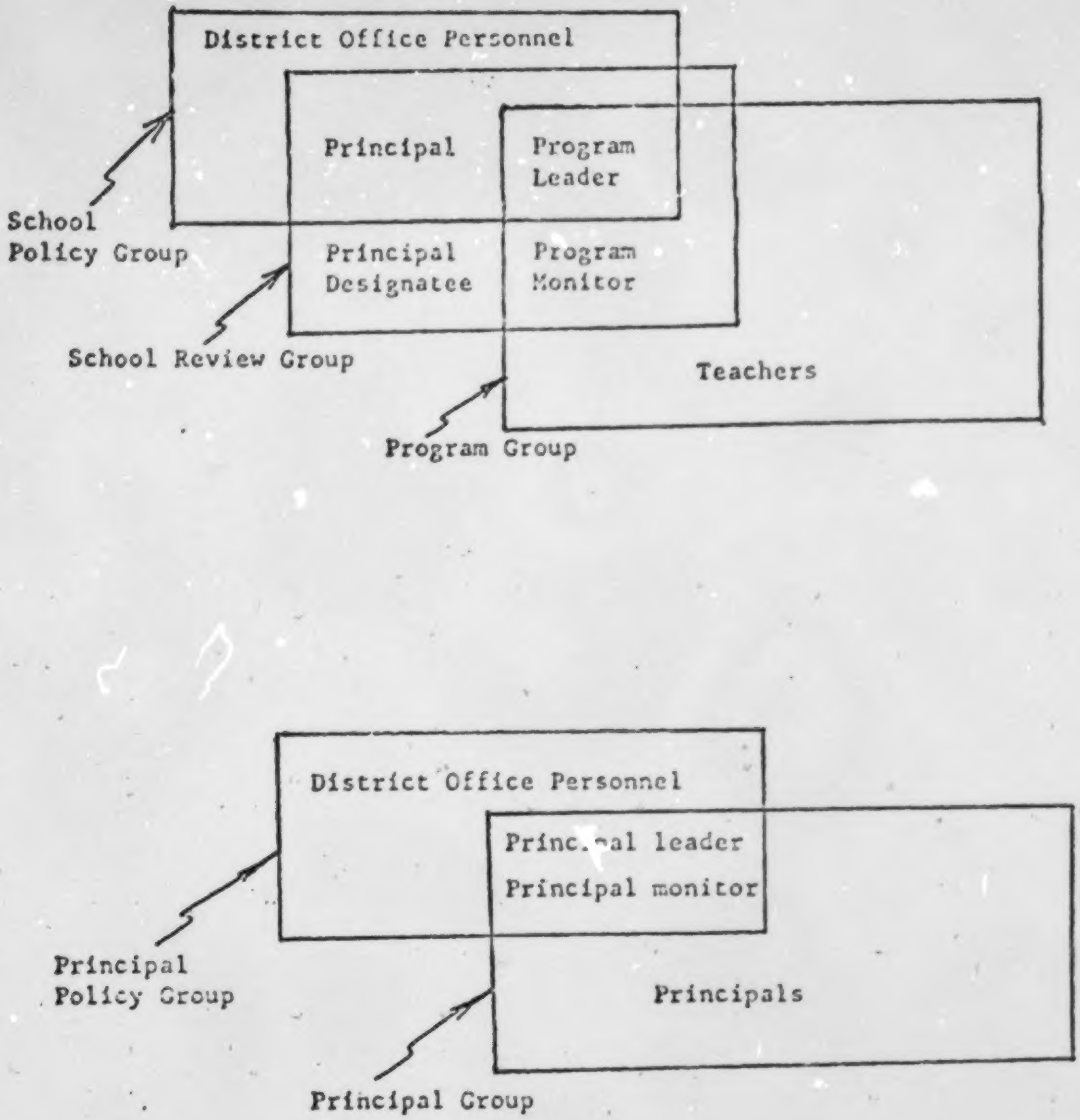
%?	%UF	NA	Mean
6	39	2	3.1
10	46	1	2.8
12	38	3	3.0
4	36	11	3.2
15	42	1	2.7
22	20	0	3.1
30	24	3	2.9
4	32	4	3.5

District

%?	%UF	NA	Mean
7	27	19	3.3
5	70	6	1.9
20	45	31	2.3
6	18	151	4.1
25	14	8	3.3
10	31	4	3.0
18	7	28	3.9
6	51	55	2.7

		FR
62.	I am required to do too much administrative paper work (attendance reports, tardy slips, statistical reports, etc.)	D
8.	I am required to perform too many non-professional duties here (playground, hall, stairs, lunchroom, and study hall duties).	D
42.	I receive sufficient clerical assistance to do my job effectively.	A
131.	So far as I am concerned, extracurricular duties (sponsoring student clubs and activities, etc.) are distributed fairly here.	A
76.	I am asked to read too many communications from "higher-ups" in this school system.	D
143.	This school assumes too many educational responsibilities that properly belong in the home or to other community agencies.	D
15.	Interruptions (messages, monitors, intercom bulletins) are kept to a minimum here.	A
57.	A proper amount of paraprofessional assistance is available to the teachers in this school.	A

FIGURE iii. Diagram of the Overlapping Groups


District Office Personnel
Principal
Program Leader
School Policy Group
Principal Designatee
Program Monitor
School Review Group
Teachers
Program Group
District Office Personnel
Principal leader
Principal monitor
Principal Policy Group
Principals
Principal Group

Finally, we considered it important that the program and principal groups be voluntary, that they be limited to peer membership, and that group level data, meant only for the use of those who generated it, should be available to others only when aggregated at a district level. The first two rules were considered necessary to ensure productive groups. The third was meant to reduce evaluation apprehension which might bias survey response.

ENTRY AND INSTALLATION OF THE PROGRAM

The program, as briefly described above, was designed for the typically structured American school system. Our major tasks were first to gain entry into a school system and second to install the program by training the necessary individuals, administering the survey, and processing the data for feedback.

The process of gaining entry into and acceptance of the project by a district is worth a paper in its own right. Only some pertinent highlights of our particular experience will be covered here.

The target district selected is a small city with most of the problems and attributes of the American urban scene. There is a large transcient population and two significant minority communities, Spanish-speaking and black. There are wide variations in SES level. All these city attributes impact on the typically organized and operated school district. There have been racial problems in the schools and lately the Board has become very concerned with discipline problems, especially at the secondary level. The Board is conservative in its policies. The official bargaining unit for the teachers is the AFT affiliated union.

Initial contact was made with the Superintendent and quickly developed into a series of contacts with and presentations to: his team of assistant superintendents; an ad hoc committee made up of a number of administrators including principals; the Superintendent's advisory council made up of all central office administrators and all principals; a steering committee for the project made up of teachers, administrators, and certain staff personnel; a group of teachers representing all schools; and--finally--presentations to each of the schools in the district. This process lasted from March to November, 1974. In December the Superintendent left the district to assume a new position. An assistant superintendent had been named earlier as acting superintendent and had assumed responsibility over the project, so there was minimal loss of continuity. Implementation of the program did not begin until after the Superintendent's departure. All data reported here occurred under the administration of the acting superintendent.

Although the intervention had been designed as districtwide, it became apparent that not all school faculties or principals desired to participate. We considered the potential impact of the program to be proportional to the amount of participation in the individual faculties. We, therefore, arbitrarily developed a rule of thumb requiring a positive vote of 50% or more in each building before it would be considered as a participating school. The schools voting not to participate would function as quasi-control schools, by filling out the surveys. This provided more valid districtwide comparison data for the feedback to participating schools. Eight elementary schools and one high school- slightly less than half the schools in the district- voted to participate in the program as experimental schools. The attempt was made to make sure that all schools understood as fully as possible the rationale and design of the program.

Immediately after the determination of which schools were to participate, the principal survey was administered and principal training was held. A leader and a monitor for the principal group were elected during training.

Survey administration to teachers and teacher training was postponed because principals were still reluctant to go ahead until they could be assured that the central office fully understood and sanctioned the intervention. This uncertainty was caused by the superintendent turnover and the fact that the sequence of steps in the entry process represented more a passing-of-the-buck to successively lower levels in the district than it represented a "democratic" decision process. The central office never unambiguously committed itself to the project. At the best, the program seemed to be merely tolerated.

As the entry process continued, a dilemma facing us became more and more apparent. The objective of this intervention was to superimpose a collective decision structure on the existing authority structure, but we were going through the authority structure to do so. The basic assumption behind the program was that uncertainty present at the technical level was not being removed by decisions made within the authority structure. One of the reasons for this is the limited perspective of administrators by virtue of their organizational position. To ask for admistrative commitment was, at the extreme, to ask for a decision based on a perspective or understanding they do not have. Toleration for such a program may be the most that can be expected, in the beginning, from administrators. Of course in education there are many administrators who have been teachers and still retain a sense for the needs teachers have which this program addresses These people do not feel a conflict in using their position of authority to encourage a program like this. In our experience these administrators were mostly principals.

A one-day training session for central office staff was held in January. This training was mostly educative in nature so that district personnel better understood the program. Although, after this session, commitment by the central office was still not particularly obvious--if indeed it was present--installation of the program continued.

Immediately after three days of leader training and one day of monitor training, baseline data for purposes of project evaluation were collected via a questionnaire from all schools.Data from this form were not fed back. This School System Description Questionnaire (SSDQ) contained scales derived from rather standard perceptual measures commonly used in organizational and educational research, e.g., Satisfaction (Porter and Lawler, 1968), Decisional Deprivation (Alutto and Belasco, 1972), and Cohesiveness (Michigan Assessment of Organizations, 1974). In addition, there appeared a scale originally devised by one of the authors (Cooke, see Coughlan et. al., 1972) which measured the extent to which the school engaged in activies indicative of each of the seven conceptual stages of the collective decision change process.

PARTICIPATING VS. NON-PARTICIPATING SCHOOLS

The process of "recruiting" experimental schools is an interesting one in itself, but obviously the fact that schools self-selected themselves into the program has bearing on the kind of impact the SF-PS-CD program has. For this reason it is necessary to compare the reasons for rejection and acceptance and look for forces which may help explain later results.

We have noticed many reasons why schools rejected the program. 1) Many people simply did not understand the program. It is a complex one, difficult to explain in a short session, subject to misinterpretation. 2) It was sometimes perceived and lobbied against as some type of academic "rip-off" designed to create Ph.D. dissertations. 3) There was uncertainty about its point of origin. Some people were suspicious that this program was initiated by the district and distrusted the data collection. 4) To many, the program looked like a new round of proliferating committees. Many committees had been set up by the departing superintendent with the perceived results being mainly frustration and wasted effort. 5) There was concern that the central office did not, in fact, support the project. The departing superintendent was perceived as its sole advocate in the central office.

Most basically, however, many individuals either 6) saw no need for such a program in their school sometimes because a structure akin to that of the program already existed in their school or 7) did not see the benefits coming from the program to be worth the effort.

The forces working for acceptance of the program can be somewhat more systematically developed. Fundamentally, teachers (and sometimes principals) accepted the program because there was a felt need caused by the situation in the school or district. This felt need could be traced to either or both of the following: 1) There existed a problematic or uncomfortable situation in the school. In this case, acceptance was basically a reaction caused by the situation. 2) There was a discrepancy sensed between the way things were carried out in the school and the way things should be carried out. This represents a proactive stance and seems to be tied up with a "professional" approach to the educator's role.

The existence of needs had to be coupled with a belief that the SF-PS-CD program did fit those needs and that it was a legitimate way of dealing with educational and school problems. In the more difficult situations this may have been more of a hope than a belief.

Opinion leadership appears to have played a role in establishing this belief. Teachers and principals who attended earlier sessions in the entry process often set the tone for subsequent acceptance--or rejection--by their school faculty.

Finally, the entry process itself set the stage for acceptance of the program by schools. The "democratic" process allowed some higher level administrators and even principals not to take a stand on something they viewed with a jaundiced eye. If these people had been pushed for commitment it may not have been forthcoming. The entry process by default put the final decision in the hands of those who could most identify with the needs the program was designed to deal with and the legitimacy of the approach.

Based on the above we expected there to be systematic differences between the schools voting to participate and others. A natural sort of comparison to make is to do T-tests on the Means of the two school groups using pertinent scales available on the surveys and the SSDQ. Since secondary schools used separate surveys and since the situation there is qualitatively different from elementary schools, the following comparisons will be actually performed only between participating and non-participating elementary schools.

What are the survey categories which would be most likely to distinguish between participating and control schools? To determine this likelihood we looked for categories which would tend to reflect situations expected to vary from school to school, and which would be perceived as appropriate targets for our program as it was presented. Based on these criteria the following categories seem most likely to discriminate:

Colleague relations: The items in this category form two factors which are highly intercorrelated. One set of items refers to the professional relations among faculty members, the other refers to personal relations. Participating schools would seem likely to be less favorable in this regard than controls. The program would be perceived as dealing directly with this kind of need area, as a part of the group development effort by leaders and monitors. This category score and all others which follow are the means of responses to all items in them.

Supervisory relations: The items in this are highly scaleable (Cronbach Alpha= .92) and generally reflect the quality of relations between teachers and the principal. Here again is a frequent source of concern for teachers. The program may be perceived as a vehicle for dealing with or a means for circumventing such problems. This score is expected to be less favorable in participating schools.

Performance and Development: The items in this category form two correlated factors. The dominant factor is concerned with the individual's performance and its evaluation; the second is concerned mainly with the extent that the situation is conducive to professional development. The former would tend to be sensitive to uncomfortable and problematic settings, the latter to settings where professional needs are not met. Participating schools should be lower on this category.

Voice in the Educational Program: This is a more fragmented category made up of at least three factors, but all items are positively correlated. The substance of the items revolves around opportunity for and adequacy of teacher inputs into policies and decisions, and the control the teachers feel in certain educational areas. Once again participating schools are expected to have been partially motivated by a situation less favorable in this regard.

Educational Effectiveness: Items in this category form a single scale (with a Cronbach Alpha of .82). These items refer to perceptions of the school's effectiveness in educating its students. Assuming teachers are professionally concerned about just this ultimate consequence of their performance, those schools low in perceived effectiveness are expected to opt for participation.

Reactions to Survey: This category contains two items: one reflects the perceived quality of the survey, the other the expectation that filling out the survey will do some good. Responses to this category should show that in this regard participating schools are more favorable. This is the single category that we expect to go in this direction.

The remaining categories on the elementary survey are not expected to discriminate between participating and non-participating schools. These categories are briefly described below:

Administrative Practices: Contains two highly correlated factors: one dealing with central office practices and concerns which affect teachers, the other with the presence of rules and procedures in the district. This was expected to be fairly constant across all schools since the referent is largely the same.

Professional Work Load: Several uncorrelated factors are present here including opportunity for faculty to perform professional duties, the quality and quantity of meetings, the quantity of the work itself, and the quality of the work assignment. This and the next category seemed likely to have been standardized by union contracts.

Non-Professional Work Load: This consists of two relatively independent factors dealing with 1) teacher duties not related to instruction, e.g., extra-curricular and administrative, and 2) need for assistance.

Materials and Equipment: Here again are several intercorrelated factors dealing with supplementary materials, books, reference materials, equipment, etc. We assumed much of this is equalized across the district and we did not expect significant differences between control and participating schools, although perceptions can be colored by real differences in other areas. Some of this type of resource availability is also affected by the entrepreneurial abilities of the principal.

Building and Facilities: The several correlated factors comprising this category include the quality of the facilities, their layout, their adequacy and convenience, etc. It is doubtful that teachers would feel that a program like this one would have an effect on these rather permanent elements of their surroundings.

Evaluation of Students: This category contains correlated factors representing evaluation procedures, grading, testing, student record keeping, etc. This is expected to be relatively standard across schools.

Special Services: This category is the largest and contains the most diverse factors. Some factors are negatively correlated. Items referring to such things as curriculum assistance, slow learners, speech specialists, social workers, the music program, and the bilingual program are representative. Since most of these services and personnel are coordinated centrally, individual schools are not expected to differ much.

School Community Relations: Another fragmented category, this contains reference to the school Board, community pressure, the educational orientation of the community, and community-school resource sharing. Except for the last area, teachers are not expected to see a program such as ours as an instument for dealing with problems or needs which may be represented by this category score.

Students: This category contains items which refer to procedures, policies, and arrangements used by the school in dealing with students, but it also contains items referring to characteristics of the students themselves. The former would be expected to be related to the decision to participate since such conditions are obviously controllable by personnel decisions; however, the latter would be seen as not under control of school personnel, thus reducing the ability of this category to discriminate between control and participating schools.

Some selected scales from the SSDQ are expected to discriminate between the participating and the control groups:

Cohesiveness: This scale has a Cronbach Alpha of .712. It is partially comparable to the survey category of Colleague Relations.

Satisfaction: This scale as a whole has a Cronbach Alpha of .914. It contains two factors: one dealing with satisfaction stemming from attruibutes connected with the job itself, Job Satisfaction (Cronbach Alpha=.877); the other referring to the relationship between the job and the particular context it is in, Job-Context Satisfaction (Cronbach Alpha=.799). These should function as generalized indices of the extent to which school personnel are experiencing needs stemming from problematic or uncomfortable situations.

Decision Making: Two kinds of scores are considered. The first score is concerned with the actual level of decisional participation which school faculties perceive. The second measures the deprivation the teachers feel by subtracting the level at which they feel they should participate in a decision from the level at which they actually participate. The decisional items consistently factor into two kinds: 1) student-oriented decisions, and 2) context or organizationally oriented decisions. Since both are indicative of felt needs potentially dealt with directly by the program, decision level and decisional deprivation are expected to discriminate between the two school groups. (Decisional deprivation: student oriented, Cronbach Alpha=.749; context oriented=.827) (Decisional level: student oriented, Cronbach Alpha=.738; context oriented=.724).

Collective Decision Change Processes: These measure the extent to which the faculty of a school is performing in a way consistent with the sub-processes enumerated in the seven-stage model. The control and participating schools should differ on each of the scales corresponding to each of the stages: These questions most resemble the program as described in the presentation at each school. Therefore, participating schools are expected to have opted in, because they are perceived as most lacking these faculty change-oriented activities. There are seven scales involved: Evaluation (Alpha = .753), Solution Generation(Alpha = .751), Internal Diffusion (Alpha = .702), Legitimation (Alpha = .646), Adoption (Alpha= .779), Implementation (Alpha = .745), Routinization (Alpha = .674).

Table A1 and Table A2 present the results of the various T-tests described. Since the direction of the differences is hypothesized each time, one-tailed probability levels are used. The expected direction of mean differences is upheld in every case. The level of significance for many of the categories and scales was not expected. Administrative practices, materials, and equipment, and special services all are significantly (but unexpectedly) less favorable in the participating schools. This may indicate a somewhat systematic short-shrifting of participating schools in terms of the resources and procedures referred to in these categories, or at least a perception of such discrimination. As suggested earlier, for materials and equipment, unfavorable situations in these areas may reflect the abilities of the principal to deal with district-level personnel.

The related measures of colleague relations and cohesiveness do not discriminate as strongly as anticipated, nor do educational effectiveness, reactions to survey, or most of the satisfaction and decision scales.

Supervisory relations, performance and development, voice in the educational program and student oriented decision participation all show significantly lower levels in the participating schools, as expected.

The consistently significant differences on the change process stages (Table A2) shows that participating schools perceived a lesser presence of these procedures, and activities which are immediate objectives of the program. These results, when combined with school survey results, indirectly show that the perception of a higher presence of change process activities is associated with school situations which are more favorably perceived.

An important point must be made here, namely: All the data reported in Table A are perceptual. As such the consistency of direction of mean differences can be explained by some "halo" effect. Furthermore, rather than reflect on actual

TABLE A1.

SURVEY CATEGORY	GROUP MEANS Participating Schools (N=8)	Control Schools (N=9)	T-Statistic	P (1-tailed)
Administrative Practices	2.86	3.02	-1.40	.09
Professional Work Load	2.93	3.02	-0.67	.25
Non-Professional Work Load	3.24	3.28	-0.24	.40
Materials & Equipment	3.00	3.15	-1.63	.06
Building & Facilities	3.05	3.06	-0.08	.47
Educational Effectiveness	3.12	3.28	-0.93	.19
Evaluation of Students	3.00	3.06	-0.51	.31
Special Services	2.90	3.21	-2.26	.02
School Community Relations	2.95	3.04	-1.02	.16
Supervisory Relations	3.09	3.61	-3.23	.003
Colleague Relations	3.16	3.32	-0.79	.22
Voice in Educational Program	2.61	2.77	-1.47	.08
Performance & Development	3.06	3.40	-4.28	.0005
Students	3.11	3.23	-1.04	.15
Reactions to Survey	3.32	3.10	1.05	.15
SSDQ SCALES	(N=8)	(N=8)		
Decisional Deprivation				
Student Oriented Decisions	-0.94	-0.82	-0.98	.17
Context & Organizational Decisions	-1.59	-1.48	-1.00	.17
Actual Decision Participation				
Student Oriented	3.34	3.53	-1.89	.04
Context & Organizational	1.56	1.63	-0.99	.17
Cohesiveness	4.53	4.64	-0.43	.34
Job Satisfaction	4.41	4.53	-0.79	.22
Job-Context Satisfaction	4.15	4.39	-1.46	.08
Total Satisfaction	4.28	4.45	-1.26	.11

TABLE A2. Extent to Which Activities Characteristic of Change Processes Do Not Occur in Schools.

STAGES IN CHANGE PROCESS	Participating Schools (N=8)	Non-Participating	T-Statistic	P (1-tailed)
Evaluation*	3.78	3.46	1.79	.047
Solution Generation*	3.79	3.33	2.35	.017
Internal Diffusion*	4.26	3.80	3.37	.0025
Legitimation*	4.20	3.81	3.02	.0045
Adoption*	4.15	3.61	2.79	.007
Implementation*	3.71	3.33	1.96	.035
Routinization*	3.71	3.31	2.36	.017

*The higher the value the less the activities occur (six-point scale).

difference in state between the participating and control schools, their results could be explained by the fact that the two groups knew their relative status vis a vis the program and that this knowledge systematically influenced their responses. Participating schools, for example may tend to be as truthful as possible, or even slightly over critical in anticipation of getting survey results fed back which are useful. Control schools, on the other hand, while expecting the results to be fed back to them, may not view that feedback as useful. They may, in fact, be cognizant of the possible evaluative uses of the data and tend to inflate the favorableness of their responses. An alternative argument leading to the same result is that individuals in both sets of schools may tend to respond in a way which justifies their decision to participate or not.

None of these alternative explanations for the obvious differences in responses between the participating and control groups are applicable when one compares schools within the participating group as we will do in the next section of this paper.

AN EVALUATION OF FIRST YEAR RESULTS

It is not possible, at this point, to compare the functioning of the participating schools with the controls. Therefore, it is helpful to devise a meaningful way of comparing results of the SF-PS-CD program as it progressed within the sample of participating schools.

As a way of sorting out process and product findings, we decided on a straightforward approach. Since the participating schools as a group were less favorably perceived than the controls as a group, and since we noticed that on many categories some participating schools were among the most favorably perceived in the district, it seemed that there might really be two natural groups into which to split the participating schools: 1) a "deviant" group of very unfavorably perceived schools and 2) a "normal" group of average or higher than average perceived favorability, relative to the district as a whole.

To generate this split within the participating group of elementary schools we ranked the eight schools for each category in the elementary survey. We achieved a final ranking by totaling all the rank scores for each school and then ranking these totals. Table 3 shows the ranks on each category, the final survey rankings and, for comparison purposes, the rankings on the change processes. As a check on our ranking, we averaged the category Means for the entire elementary survey for each school and then ranked these overall category averages. The results were the same.

The survey was used to achieve these rankings because this is the same data that was fed back to the schools. It, therefore, should have a direct impact on the subsequent process which takes place in the school and on the final products or changes which result.

Our hypothesis at this point is that more positive results will be attained by the more favorably perceived schools. There are at least three reasons for this expectation: 1) Since these schools do not appear to be participating due to a particularly uncomfortable situation, we can suspect the personnel are more professionally motivated. 2) Because their situation is less extreme, it is more easily dealt with. 3) These schools may not contain climates, situations, or interpersonal syndromes which would be detrimental to the establishment of the group processes required.

TABLE B.

SURVEY CATEGORY		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
		RANKS of SCHOOLS							
I	Administrative Practices	1	3	2	4	5	7	6	8
II	Professional Work Load	1	2	4	5	6	3	7	8
III	Non-Professional Work Load	1	2	3	7	5	4	6	8
IV	Materials & Equipment	3	1	8	5	2	7	4	6
V	Building & Facilities	2	7	1	3	4	5	6	8
VI	Educational Effectiveness	2	3	1	5	4	6	7	8
VII	Evaluation of Students	6	1	3	5	2	4	7	8
VIII	Special Services	3	2	5	4	1	8	6	7
IX	School Community Relations	6	2	1	3	4	5	7	8
X	Supervisory Relations	1	2	3	5	6	7	4	8
XI	Colleague Relations	2	6	3	4	7	5	1	8
XII	Voice in Educational Program	1	2	7	3	4	5	6	8
XIII	Performance & Development	1	2	4	3	5	6	7	8
XIV	Students	2	3	1	4	6	5	7	8
XV	Reactions to Survey	1	5	8	3	7	2	4	6
		33	44	54	63	68	79	85	115
	Overall Rank	(1)	(2)	(3)	(4)	(5)	[illegible]	(7)	(8)

Higher Perceived Favorability — Lower Perceived Favorability

GROUP CHANGE PROCESSES	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Evaluation	2	1	8	6	4	7	3	5
Solution Generation	4	1	7	5	6	3	2	8
Internal Diffusion	6	4	1	5	7	3	2	8
Legitimation	4	1	7	5	2	3	6	8
Adoption	2	1	3	4	7	6	5	8
Implementation	2	1	6	5	7	4	3	8
Routinization	4	2	5	6	8	1	3	7
	24	11	37	36	41	27	24	52
Overall Rank	(2)	(1)	(6)	(5)	(7)	(4)	(2)	(8)

Now that we have a conceptual division of the participating elementary schools, we can proceed to evaluate the first year results. This evaluation will be divided roughly into process and product considerations.

PROCESS

After training of leaders and monitors, the individual school groups were given released time during three school days in order to begin the SF-PS-CD process. Each group was asked to meet for two hours each day. We considered these three two-hour meetings essential to start up the program. The meetings were held from late February through the middle of March, 1975. Any meetings beyond these three were purely at the discretion of the group. School groups committed themselves to the first three meetings by accepting the program, although attendance was still to be voluntary. The principal group chose to meet the same days and times as the teachers.

Leaders had been given a tentative outline and groundplan for proceeding during these first three meetings. The first step was a presentation of the program with some rather specific explanations about the need for progressing through all steps in the change process and the purpose, in this regard, of the structure which had been set up. This was immediately followed by the feedback of the survey data. Since there was so much data available, leaders were given a tentative decision algorithm for choosing which categories to present. This decision process would hopefully result in picking categories most likely to result in some product. Feedback, it was felt, would probably take the greater part of the first meeting. Leaders were urged to get to the legitimation stage on one problem solution by the end of the third meeting.

Monitors were given structured materials for observing and recording the processes of their groups (Meeting Monitoring Forms, MMF). On each MMF the monitor noted the survey categories being considered, the topic being dealt with, and various estimates of the quality of the group's process. These include: the degree of conflict present; the degree of cooperation present; the amount of dissatisfaction which group members feel towards the situation described by the topic at hand; the openness of the group members; the degree of task orientation and of personality orientation; the degree of organization exhibited by the leader; and the degree of participation (in percent) of those actually present. All responses, except organization and participation, were made on a six-point scale, six meaning the referent was present to a high degree. Organization was estimated on a four-point scale, four meaning highly organized. Since all groups met all three days and monitors filled out the forms in most cases, we have summary estimates of the group processes during this critical startup period.

Table C presents this data. Notice that the high school has five groups, each receiving the same data but under different leadership and monitorship. High school groups were organized by planning periods. The feedback data profile for the high school hovered around the secondary school averages, most similar in appearance to the elementary school profiles of Schools B, C, and D.

Table C reveals rather consistent differences between the two elementary groups in three areas: dissatisfaction caused by the topic refent, organization of the leader, and the degree of participation within the group. The degree of

TABLE C. Monitor Perceptions of the First Three Program Meetings ([illegible] Time Provided).

SCHOOL/ GROUP	Conflict	Cooperation	Dissatisfaction Caused By Topic Referent	Openness	Orientation		Organization	Degree of Participation
					Task	Personality		
A	4.7	3.7	5.3	5.7	4.0	3.7	3.7	93%
B	1.7	4.3	2.3	4.0	3.7	1.7	4.0	67%
C	2.0	4.7	5.0	4.7	4.3	4.0	4.0	87%
D	1.0	5.3	2.0	4.3	4.7	1.3	4.0	63%
Average (A-D)	2.35	4.5	3.65	4.7	4.2	2.7	3.9	77.5%
E	3.0	2.3	3.7	2.3	3.0	3.0	2.3	33%
F	1.7	4.3	1.7	4.0	4.3	1.5	2.7	53%
G	1.0	5.7	3.3	6.0	4.7	3.0	2.7	67%
H	1.0	4.7	1.0	4.7	4.7	4.7	3.7	70%
Average (E-H)	1.7	4.25	2.4	4.25	4.2	3.0	2.85	55.75%
HS1	1.3	5.0	2.3	4.7	4.7	1.0	3.7	73%
HS2	3.7	4.3	2.7	4.0	3.0	3.0	3.0	65%
HS3	3.7	3.0	4.3	3.7	5.0	3.5	2.7	77%
HS4	4.5	3.0	3.0	5.0	3.5	4.5	3.0	80%
HS5	3.3	3.3	3.3	5.0	5.0	2.5	3.0	70%
Average (HS1-5)	3.3	3.7	3.1	4.5	4.2	2.9	3.1	73%
PRINCIPAL	2.5	5.0	3.0	5.5	3.5	4.5	2.5	80%

conflict present at the meetings differed somewhat for the two groups. All other scales do not differentiate between the two groups. Evidently the "higher" schools felt capable of dealing with more salient topics--if dissatisfaction can be interpreted this way. "Higher" school leaders definitely seem more capable of organizing the meetings. This could be a function of the selection criteria used by the two groups voting for leaders. Such selection criteria might have been influenced by the expectations and orientations that faculties had. Professionally oriented faculties who expected results from the program may have picked individuals with leader qualities. Faculties reacting against their problematic situations, often including internal problems, may have picked peacemakers, leaders of one faction, or simply had no leaders to pick. An alternative explanation of these results may simply be that groups A through D provided a setting where leaders appeared more organized.

Following the three initial meetings, faculties were on their own. They determined their own meeting times and dates. Unfortunately, monitors became much less concerned with the paperwork and their role in general. Monitors from groups D and 3 continued sending in forms regularly and found them very helpful. Those representing groups E, F, A, and HS1 sent forms in occasionally. All others dropped the practice. In retrospect monitor training appears to have been too short and inadequate. Further, we were never able to overcome the image of the monitor's role as basically secretarial, an image which many rebelled against.

The seven-stage change process provides a convenient framework for a concise reporting of process information. Most of the information reported in the following is the result of interviews with monitors, leaders, and principals.

Evaluation: This stage includes the survey feedback step and generally presented few problems due to the guidelines we had provided. Data was presented by means of transparencies or overhead projectors. School G actually fed back all 15 categories. No other school did more than four. High interest in the data was reported in most groups during the meetings. However, few people availed themselves of the data between meetings. Data was not distributed generally because of anonymity problems and to keep others from using the data to evaluate schools or principals. The leaders in HS4 and HS5 both had trouble in explaining how to interpret the data. Explaining the reversal of negatively worded items was most problematic in this regard.

In general, the feedback of the data seems to have had its planned effects at this stage. The identification of problems was considerably helped by the presence of detailed information about the group's perceptions of the specific situation in which they were operating. The fact that items were almost always specific to school setting and had often been worded to support task oriented approaches also expedited the identification of problems.

A major problem at this stage was the selection of the problem area with which to deal. Leaders and Monitors, as a team, had to prestructure the feedback 1) to avoid inundating the group with information, 2) to make sure the problem categories first considered were of a doable nature, and 3) to maximize the probability that they would by interesting and perceived as important by the group. Often, however, objectives 2) and 3) were incompatible, at least in particular group situations. Some groups, such as HS4, HS3, and School H shunned smaller, doable problem areas presented by the leaders as trivial and opted for larger, important, but sometimes insoluble problems.

Solution Generation: Groups were genreally able to generate workable solutions to problems. Exceptions occurred when problems tackled were too large and the process of defining subproblems and change goals--let along coming up with solutions--took a large amount of time. Groups HS3 and HS4 fall into this category. (See Table D.) Even though both these groups worked steadily right up to the last week of school, there was no tangible evidence of an impact although detailed descriptions of attendance procedures and policies from over 50 high schools were collected, and several memos were sent out offering alternative solutions to the entire school faculty.

Some groups were superficial in their processes, School G, for instance, after defining the fact that they had a large number of students with special problems as their problem area, "solved" the problem by requesting more personnel to deal with them. They quickly discovered that results are not that simple to come by. Their experience underscores a recurring lesson of this program, that if a faculty wants to get results from their efforts, they must work very hard and very skillfully. Setting up a structure and a set of procedures to follow, as this program does, may be necessary for survey feedback to have an impact but it is not in and of itself sufficient.

Internal Diffusion: This process, i.e., the checking out of proposed solutions with others not in authority but who will be affected by those solutions, was problematic in some cases. School D and group HS1 both ran into unanticipated resistance when attempting to implement solutions. In both cases the groups had to go through a belated internal diffusion process.

The high school groups in general experience this stage as perhaps the most problematic. A viably sized problem-solving group of necessity must contain only a fraction of the entire high school faculty but will be dealing with problem areas and solutions applicable to the entire school. Such communication problems are traditionally overcome in organizations by functional or project differentiation. In the high school this has meant grade level and departmental groupings. We wanted to avoid duplicating these existent differentiation structures, so at the advice of the school personnel we created groups by planning period of the individuals. These groups cut across all other organizational groupings and potentially have an important integration role. (Evidence that this role was not previously being adequately performed is provided by the fact that three high school groups, HS2, HS3, and HS5 all began with interdepartmental relations as a problem area. HS1 is presently dealing with a problem which involves intergrade and interdepartmental coordination.)

Legitimation: In most cases this stage meant holding a review group meeting. School D was the only school to use a policy group involving district level personnel. Some solutions needed only to be legitimated by the group itself. Schools E and F implemented only this latter type of solution.

The process of setting up the review committee revealed the key role which the principal has in this program. Both schools F and H experienced trouble in setting up review groups with their principals. This significantly affected further efforts.

While it was expected that leaders would need to put much time and effort into the stages leading up to legitimation, we expected the energies going into the processes of adoption, implementation, and routinization to be more spread out, i.e., either delegated to group members or transferred to other areas of the

TABLE D.

SCHOOL/ GROUP	Categories Dealt With	Results - Solutions	Ratio of Survey Initiated to Total Solutions	# of Results Past Legitimation Stage	A # of Additional Mtgs.	B Average Attendance %	Continuation Index A x B
A	VII	Field Day for Students (Implem)					
	IV	Scheduling of Itinerant Teachers (Adopt)					
	IX ----	Parent-Teacher Achievement Night (Implem)	2/4	3	3	x 75	= 225
	VIII ---	Presentation by Special Services (Int Diff)					
B	XIV----	Cross Grading of Students (Adopt)					
	V-----	Procedures for Utilization of Library (Routin)					
		Budget Priorities and Spending for Resource Room (Implem)	2/3	3	8	x 100	= 800
C	IV						
	XIII						
	X-----	Set-up Weekly Principal/School Newsletter (Routin)					
	XII	Pop Machine in Lounge (Adopt)	1/2	2	2	x 90	= 180
D	XI						
	III----	Volunteer Clerical Program (Routin)					
	XII ---	Creating Teacher Workroom (Routin)	3/3	3	6	x 75	= 450
	V------	Physical Changes to Make Parking Lot Safer (Adopt)					
HIGHER FAVORABLENESS ELEMENTARY SCHOOLS		(Total)	8/12	11 (Average)	4.75	85	414
E	II						
	III						
	IV-----	Itemized Available Materials (Implem)					
	XI-----	Organized Pot Luck Faculty Lunches (Routin)	2/2	2	4	x 50	= 200
F	XI	Revamped Awards Night Program (Legit)					
	VI		1/2	1	3	x 80	= 240
	IX-----	Compiled List of Community Resources (Implem)					
G	(All ---	New Routing System (Routin)					
	Data)---	Calendar for Itinerant Teachers (Implem)	3/3	2	1	x 95	= 95
	VIII----	Sought More Special Service Personnel (Int Diff)					
H	X						
	XI						
	VII-----	Plan to Change Placement Procedures of Child in Reading (Int Diff-Legit)	1/1	0	2	x 75	= 150
LOWER FAVORABLENESS ELEMENTARY SCHOOLS		(Total)	7/8	5 (Average)	2.5	75	171
HS1	V------	Room Converted to Teacher Workroom (Routin)	2/2	2	9	x 50	= 450
	VI------	Entire Subject Area Reading Program (Legit-Adopt)					
HS2	X-------	Interdept. Liaison + Bulletin (Implem)					
		Study Hall Attendance (Solution Generation)	1/2	1	9	x 25	= 225
HS3	X	Revised Attendance Procedure (Int Diff) Working					
	XIII	Together	0/1	0	9	x 20	= 180
HS4	?	Revised Attendance Procedure (Int Diff)	0/1	0	9	x 20	= 180
HS5	X-----	Interdept. Calendar Posted (Implem)					
	XI		1/1	1	0	x 0	= 0
HIGH SCHOOL GROUPS		(Total)	4/7	4 (Average)	7.2	23	207
PRINCIPALS	?	Restructuring w/in Bldg. Budget Control (Adopt)					
		Principal Control of Scheduling Itinerants (Adopt)	0/2 [Data Substantiated their Plans - But Did Not Cause Them]	2	1	x 75	= 75

KEY

Internal Diffusion (Int Diff)
Legitimation (Legit)
Adoption (Adopt)
Implementation (Implem)
Routinization (Routin)

II Professional Work Load
III Non-Professional Work Load
IV Materials and Equipment
V Building and Facilities
VI Educational Effectiveness
VII Evaluation of Students
VIII Special Services
IX School Community Relations

X Supervisory Relations
XI Colleague Relations
XII Voice in Educational Program
XIII Performance and Development
XIV Students

[I Administrative Practices, not used]

organization via the authority structure. Such was not the case. Leaders continued to supply the driving force. This was very much the case in groups A and HS1. In groups H, HS5, and G the leaders simply stopped putting effort into the program. We suspect that leaders felt uncomfortable in delegating tasks because they lacked formal authority to do so. In some cases leaders mentioned their own personalities as being problematic in this regard.

Adoption: This stage was not problematic in most cases simply because most solutions did not demand significant behavior changes by anyone or run counter to deep-set philosophical approaches. School B did have some trouble with this stage when some teachers refused to participate in a legitimated solution which involved loosening up grade distinctions. This was a source of much conflict. It seems that the adoption process may be more likely to become problematic as the groups begin to deal with their basic functional tasks, i.e., teaching and otherwise dealing with children. Any solution which HS3 and HS4 might create (with regard to attendance procedures) is likely to create conflict at the adoption stage, although it is hopefully being minimized by thorough groundwork in the earlier stages.

Implementation: In most cases implementation did not present a major problem for program groups. However, in one instance the group had to repeat the internal diffusion stage.

Some adopted changes had their implementation postponed until after the summer vacation. Whether or not these changes are indeed implemented will be an indication of how firmly the program has been installed in the school.

Routinization: An indication of whether the changes implemented by participating schools are really a routinized part of that school's operations will be whether or not the change is still there during the 1975-76 school year.

PRODUCT

An accounting of what has been accomplished the first school year appears on Table D. The categories with which schools dealt are listed along with the solutions they devised. Solutions which were in response to particular data categories have been connected to the appropriate category by a dotted line. The ratio of survey initiated solutions to the total number of solutions is then reported. This is meant to suggest the impact the survey feedback had on the outputs of the groups. It is probably safe to say that most other problem areas and solutions were indirectly spurred or crystallized by the presence of the survey data. This was definitely the case in HS3, HS4, and the principal group.

The number of solutions which have been legitimated and have gone through at least one more stage is then presented. These are the most visible accomplishments of the program. Other accomplishments cannot be pointed to but have been reported by many of the participants. These testimonials include such benefits as increased communication, more understanding of organization problems, and increased faculty cohesiveness. Results of a second set of questionnaires in 1976 may or may not lend credence to them.

Indicators which give a sense for the degree to which the program "took" appear in the last three columns: 1) the actual number of meetings the group held after the initial three (Elementary schools met before or after the school day. High school groups met during their planning periods. Principals met after the school day.), 2) the average percent of faculty who voluntarily attended the meetings, 3) a number which combines the first two into a mutually weighted index.

DISCUSSION

As can be seen from Tables C and D the higher favorableness of schools A-D in the beginning seems to be very influential in the short term impact the program is making and quality of the process involved. This does not deny a beneficial impact of this program in the less favorable settings. Leaders and monitors in these schools did report benefits especially in terms of increased faculty interaction.

It is hard to separate, even conceptually, the defferent effects which leaders, principals, monitors, and faculties had in determining more or less success. Certainly, the groups stopped when the leaders quit, but other evidence also indicates leader impact. Comparing the high school groups where data and principal are constant across groups gives a graphic indication of how leadership varied and how that variation had direct effects on the outcomes.

What we think is clear is that feeding back survey data and at the same time providing the structure and rudimentary skills for using it to solve problems does result in changes being made. Those groups, schools, and individuals who played the game as we presented it to them did better at it than those who didn't.

We are able to make no statement right now (if ever) about the ultimate adequacy of the solutions resulting from this process. Nor do we really know if things dealt with are very important in the first place. We suspect that the real value of this program takes time to appear and is hinted at in those testimonials regarding communication adequacy and other indicators of organizational health.

Post-test survey and evaluation data will be collected in winter and spring of 1976. In addition, there will be another round of interviews. At that time we will have a better idea of the lasting power and longer term effects of the program.

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APPENDIX

ADMINISTRATIVE COMPONENT OF THE PROGRAM: GROUP STRUCTURE

Group	Functions	Composition
Principal Policy Committee	1. To respond to questions, suggestions, and recommendations of Principal Group arising out of Survey Feedback and Problem Solving sessions. 2. To sanction and suggest changes and innovations emerging from Survey Feedback and Problem Solving sessions in the Principal Group.	Superintendent or his Representative Principal Leader Principal Monitor Consultants
Principal Group	1. To interpret survey results for their own group. 2. To identify the group's key problems and needs in getting work done efficiently and effectively. 3. To diagnose the basic reasons and causes underlying work problems. 4. To determine what action can be taken by the principals to solve problems and meet needs. 5. To communicate to the Principal Policy Committee (through the Program Leader) the group's thinking, suggestions, and recommendations regarding alternative proposals for solving problems and meeting needs.	Principal Leader Principal Monitor All Principals in district

Group	Functions	Composition
School Policy Committee	1. To respond to questions, suggestions, and recommendations of Program Groups arising out of Survey Feedback and Problem Solving sessions 2. To sanction and suggest changes and innovations emerging from Survey Feedback and Problem Solving sessions in the Program Groups.	Superintendent or his representative Principal Program Leader Consultants
Review Committee (School level)	1. To plan and schedule survey administration, feedback and problem solving meetings. 2. To approve proposed changes and innovations arising out of Survey Feedback and Problem Solving sessions in Program Group. 3. To explain why proposals for change cannot be approved and to suggest modifications of proposals for further consideration. 4. To act as a clearinghouse for upward communication from program leaders to the School Policy Committee. 5. To facilitate downward communication from the Policy Committee to Program Groups on any proposed changes in, or explanations for, existing top level policies, programs, procedures, thinking, and action.	Principal Program Leader Program Monitor Principal Designatee

Group	Functions	Composition
Program Groups (School/ Departmental Level)	1. To interpret survey results for their own group. 2. To identify the group's key problems and needs in getting to work done efficiently and effectively. 3. To diagnose the basic reasons and causes underlying work problems. 4. To determine what action can be taken at the school level in solving problems and meeting needs. 5. To communicate to the Review and/or School Policy Committee (through the program leader) to group's thinking, suggestions, and recommendations regarding alternative proposals for solving problems and meeting needs. 6. To obtain from the Review and/or School Policy Committee (through the program leader) reasons and explanations for existing top level policies, programs, procedures, thinking, and action.	Program Leader Monitor Faculty of the school
Program Leader Group	1. To discuss common problems in the functioning of the Program Groups in the schools. 2. To provide a communication link between Program Groups in all schools.	All Program Leaders

SURVEY FEEDBACK AND PROBLEM SOLVING - RESULTS

Date: ____________________

The Problem and its Key Aspects	Basic Reasons and Causes
Change Goal	Solution

Appendix J
Communication Forms

ACTIONS TO TAKE

By the Teachers

Who	What	Schedule Start	 Finish	Follow up on Results

Recommendations to Others

Who	What	Schedule Start	 Finish	Follow up on Results

REVIEW (OR POLICY) GROUP MEETING REPORT

Date: ____________ Persons Attending: ____________________

____

Recommendations being Considered (attach pertinent Problem solving results form):

ACTION TAKEN

Portion of Recommendation Accepted	Modifications Made or Suggested (give reasons)	Portions of Recommendation Rejected (give reasons)

Responsibilities and Time Schedule for further Action:

Appendix K

Monitoring Forms

INSTRUCTIONS FOR FILLING OUT THE MEETING MONITORING FORM

This form should be filled out for all meetings, including program group, Review Committee and Policy Committee. Although it is especially designed for the Program Group, most sections of it are also useful for analyzing the processes and content of other group sessions.

The instrument has two purposes:

1) To serve as an aid to the program leader and monitor in analyzing the meetings to determine why things are going well or badly.
2) To provide feedback to the Northwestern project staff that will allow them to detect patterns and general problems and to suggest remedial steps when appropriate.

Below are instructions for filling out the various sections of the form:

The first half of the questionnaire involves information that is specific to the topic or problem area being discussed. Because some meetings may deal with more than one topic, there are spaces for analysis of two topics. For instance, one task in a meeting may be to pick the best solution to a problem involving scheduling of extracurricular activities; another task may be to evaluate the topic area of collegial relations on the feedback survey.

Short Description of Task(s) - Concise statement of the problem or goal area(s) and the task(s) involved.

Approximate Timing of Discussion- Estimate of the starting and stopping times of the discussion of the topic.

Survey Data Considered- If any data from the survey is used in the discussion, list the category and specific items which may have been involved.

Origin of Concern- State the source that caused the initiation of this problem-solving effort (eg. Survey, General Faculty Concern, PTO, Students, Principal, etc.).

Stage of the Decision and Change Process: Estimate where the group is in the 7-stage change process. We encourage the program leader to refer back to page 9 of the manual to make sure that all stages are being taken into account:

-Evaluation
-Solution Generation
-Internal Diffusion
-Legitimation
-Adoption
-Implementation
-Routinization

CLIMATE: In this section you can record your general impressions of the meeting along several general dimensions. Some of these dimensions may vary from topic to topic. For instance, in one general problem area there may be a great deal of cooperation whereas the discussion of another problem area may be divisive and uncooperative. It is useful to you and the leader to know if this seems to be related to the topic or issue, rather than a lasting characteristic of the group. Below is a short description of possible kinds of behaviors to indicate whether the characteristic is present.

Conflict: Behaviors which indicate conflict include arguing, defensive behaviors, failure of the group to agree on a common ground for discussion, and general negative responses by group members to each other.

Cooperation: Behaviors which indicate cooperation include willingness to compromise, flexibility, working together, and attempting to find agreement between members.

Level of Dissatisfaction Caused by the Topic: A topic or problem area is characterized by high dissatisfaction if the teachers are generally angry or upset about the problem or if the problem is such that it is very much in the minds of the members. There is a sense of urgency about correcting whatever the conditions that are causing the dissatisfaction.

Openness: Behaviors indicating openness in a meeting include the willingness to speak one's mind and volunteer information. Implied is that individuals do not fear reprisal or repercussions as a result of their statements.

Discussion Orientation:

- With Task - Does the group concentrate on roles, functions and goals in discussing the problem area?
- With Personality - Does the group spend a good deal of time discussing specific personalities involved in the problem area?

CHARACTERISTICS OF THE GROUP SESSION: These items should be answered for the group session as a whole.

Degree of Organization: How well organized was the meeting?

Degree of Participation: Approximately what percentage of those attending the meeting participated in the discussion?

Task and Maintenance Functions: In responding to these, refer to page 35 of the manual.

After this form has been filled out, the results could be discussed with the Program Leader to determine where your perceptions match and where you and the program leader feel there might be a problem developing.

MEETING MONITORING INSTRUMENT

eting of ______________________ group   School ______________________   Date ______________
(program)
(review)
(etc.)

Number attending __________

TOPIC I   TOPIC II

ort Description of task(s):

proximate timing of Discussion: start __________ end __________   start __________ end __________

rvey data considered
(category and/or items)   ______________________   ______________________

igin of concern (eg., survey
ta, principal, parents, etc.)   ______________________   ______________________

age of the decision and
process (eg., evaluation,
ution generation, etc.)   ______________________   ______________________

TE (as related to topic)

conflict: Low ___ High   Low ___ High

ation: Low ___ High   Low ___ High

evel of dissatisfaction
caused by topic: Low ___ High   Low ___ High

openness: Low ___ High   Low ___ High

discussion orientation:
task: Low ___ High   Low ___ High

personality: Low ___ High   Low ___ High

ARACTERISTICS OF THE GROUP SESSION:

degree of organization :   unorganized ___ moderately organized ___ very organized

degree of participation :   0% ___ 50% ___ 100%

	Frequency Engaged In					Adequacy				
	Not at all		A few times		Very Frequently	Not Enough		Just Right		Too Much
Task Functions										
1. Initiating	1	2	3	4	5	1	2	3	4	5
2. Information or opinion seeking	1	2	3	4	5	1	2	3	4	5
3. Information or opinion giving	1	2	3	4	5	1	2	3	4	5
4. Clarifying or elaborating	1	2	3	4	5	1	2	3	4	5
5. Summarizing	1	2	3	4	5	1	2	3	4	5
6. Consensus testing	1	2	3	4	5	1	2	3	4	5
Maintenance Functions										
1. Encouraging	1	2	3	4	5	1	2	3	4	5
2. Expressing group feelings	1	2	3	4	5	1	2	3	4	5
3. Harmonizing	1	2	3	4	5	1	2	3	4	5
4. Compromising	1	2	3	4	5	1	2	3	4	5
5. Gate-keeping	1	2	3	4	5	1	2	3	4	5
6. Setting standards	1	2	3	4	5	1	2	3	4	5

EXPLANATION OF USE OF PERIODIC FACULTY FEEDBACK MONITORING FORM

This form is designed to systematically solicit feedback from group members concerning their satisfaction with and reactions to the program. We suggest that it be administered to a group of teachers every two or three meetings. The results can be used by the Program Leader and Monitor to determine any changes that should be made in the meetings or program in general. It is a way to detect any dissatisfaction which may be emerging and determine its sources. This data may be profitably anonymously shared with the group members. Given such feedback, the group may be able to adjust some of its own behavior.

Suggested Procedures for Use of this Instrument:

1. Divide your group into three randomly chosen sub-groups. If your group is smaller than 10, you may want only two sub-groups.

2. After the first 3 meetings are finished, administer this form to one group. This can be done as informally as you wish. The respondents do not have to come together in one spot to fill this form out.

3. Tally the results using the tally sheet that has been provided. Each score will range from 1-7. A score of 7 indicates general satisfaction on the item. A score of 1 indicates general dissatisfaction.

4. Report the results to the Program Leader and to the group as a whole.

5. After approximately one month or two-three meetings, administer the form to a different group. Do not administer the form two times in a row to the same sub-group.

6. Tally and report the results again.

7. This sequence should be repeated as long as it is helpful to the group.

8. Please send copies of the tally form to the Northwestern Staff. Once again we will use this information to try to detect problems and see patterns. This will help us to strengthen the program. We will suggest remedial action where appropriate.

[illegible] FACULTY FEEDBACK MONITORING FORM - Tally Sheet

School________________ Date________________ Number Responding________________

Number of meetings since last Faculty Feedback Form________________

INSTRUCTIONS: For each respondent make a mark in the space of the response category which he/she checked on each item. To arrive at an item mean:

1) Multiply the total number of responses in each response category times the score of that category. (Notice that in some cases the favorable response (7) is on the left and in others it is on the right)
2) Total the scores for all categories within the item.
3) Divide the total by the number of respondents.

The scores will range from 1-7 with a high response indicating a more favorable response by the faculty.

Example: In the following example 8 teachers filled out the item. Three individuals responded with a 1; two individuals responded with a 2; two individuals responded with a 4; 1 individual responded with a 6.

3x1=3	2x2=4		4x2=8		6x1=6	
III	II		II		I	
1	2	3	4	5	6	7

Total = 3+4+8+6 = 21

Mean Score = 21/8 = 2.6

SCORE = 2.6

1. Value of Time in Meetings
D A Total =
1 2 3 4 5 6 7 Mean =

Organization
D A Total =
7 6 5 4 3 2 1 Mean =

3. Individual or faction domination
A Total=
7 6 5 4 3 2 1 Mean=

4. Express Feelings
D A Total =
1 2 3 4 5 6 7 Mean=

5. Representative Decisions
D A Total=
1 2 3 4 5 6 7 Mean=

6.Good ideas-Clear Recommendations
D A Total=
1 2 3 4 5 6 7 Mean=

7. Faculty don't carry through
D A Total=
7 6 5 4 3 2 1 Mean=

8. Inconvenient times
D A Total=
7 6 5 4 3 2 1 Mean=

iscussion outside of group meetings
D A Total=
1 2 3 4 5 6 7 Mean=

10. Fair Consideration to Recommendations
D A Total=
1 2 3 4 5 6 7 Mean=

11. Review Committee - Complete Communications
D A Total=
1 2 3 4 5 6 7 Mean

11b. Constructive
D A Total=
1 2 3 4 5 6 7 Mean=

11c. Prompt
D A Total=
1 2 3 4 5 6 7 Mean=

12. Commitment
D A Total=
7 6 5 4 3 2 1 Mean=

13. Serious Consideration to my ideas
D A Total=
7 6 5 4 3 2 1 Mean=

14. Speed of Problem-Solving Process
D A Total=
7 6 5 4 3 2 1 Mean=

15. Information to Faculty
D A Total=
1 2 3 4 5 6 7 Mean=

16. Satisfaction with Program
D A Total=
1 2 3 4 5 6 7 Mean=

Appendix L

INTERVIEW SCHEDULE
FOR ASSESSING FIRST YEAR OF O.D. PROGRAM
LEADERS AND MONITORS

1. Give an account of the program in your school thus far: (could you supply documents not already given us?)

-what problems have been tackled?

-what solutions generated? and implemented?

-what particular problems have been encountered on each?

2. How frequently did your program group meet? What time? Regularly or irregularly?

3. Were any activities carried on between meetings, such as sub-committees, regular review committee meetings, etc.? How often? Who attended?

4. What percentage of the faculty are actually involved in the program? What number?

How would you characterize their interest level?

Have any particular groups resisted the program? Who? How? Why?

Was the resistance successful? was it justified?

5. How many of the special service personnel or itinerant teachers are actually involved in the program? What is their interest level?

6. Do the faculty members perceive this group as permanent? Legitimate? A real change from the way things were before?

7. Does your principal seem to perceive this group as permanent? Legitimate? A real change from the way things were before?

How would you characterize the reactions of your principal to this change/program?

8. Does this program cause any problems with the teachers' union?

How do you perceive its relationship to the union?

9. How do you handle Review committee meetings in your school?
eg. scheduling, formality, attendance, taking minutes, etc.

10. Have you had occasion to call a Policy committee meeting? ______ Did it meet? ______
What procedures were used? Who attended? Was the central office accessible, responsive

11. Have the upward communication forms been used by the group?______________________

12. Have the downward communication forms been utilized by the Review and/or Policy committees?__________How have you made their content available to the staff?

13. Has there been much interest in the data that was fed back or made available to the teachers?__________Have they gone to see it?________________________

-What kind of response was shown to the data? criticisms, complaints, suggestions?

-How can data be more useful? Does it need to be?

-Were some categories of more use and interest than others? Which ones?

-Was the data the source of the problems your group dealt with? Were there other sources? (probe for identity of other sources, and the relative importance each?)

14. Has the role you play in this program affected your general role as a member of the faculty? eg. your acceptance by the other teachers, by the administration, etc.

15. Has this program affected the role of the principal? Does he do anything differently?

16. Has internal diffusion been a problem in your school? How have you tried to deal with it?

Have any other stages in the process been problematic?(evaluation, solution generation, legitimation, adoption, implementation, routinization)

17. Have you utilized resource people in your group? ______________ Who and how?

18. What changes or modifications would you suggest for the program?

What have been the weaknesses of this program?

What strengths do you feel the program has?

19. Please comment on the training you received.

What skills have you needed, but not been prepared for?

What aspects of training have been especially helpful?

Do you feel you could benefit from additional training next fall?________ In what areas?

20. What would you do differently if you were beginning the program over again?

21. What has been the most difficult aspect of the program for you?

22. Do you have any suggestions concerning the continuation of the program next fall?

23. Have the monitoring instruments been useful to you in improving the functioning of the group? Do you have suggestions for changes that could be made?

24. How useful have the training materials been? What are the most useful parts?

25. Do you feel the principal should be present during any and or all of the program group meetings

26. Do you feel the program is filling a need or function in your school?

Is it causing any problems?

27. Do you feel that the leader-monitor task division is functional? Has there been cooperative effort between the two?

28. Please comment on the magnitude of time that has been required on your part for this program?
On the part of other members of the staff?

29. Is the program personally satisfying?

30. Do you intend to continue in your position next year?

Date:____________________ Time:____________________

Interviewer:____

Interviewee:____

Interviewee's role in program:____________________

Interviewee's formal position in the district:

Title:____

Building:____

Appendix M

FINAL INTERVIEW

ORGANIZATION DEVELOPMENT IN SCHOOLS PROJECT

T 1. Briefly describe what has happened to the issues and solutions that were begun last year. i.e. any additional activities, were solutions routinized?

____

____

____

____

T 2. Please describe the problems that have been tackled this year, solutions that were generated and implemented, problems that have arisen.

Prob: ________________________

Prob: ________________________

Prob: ________________________

Prob: ________________________

T 3. Have any resource people been called in to meet with the group? Who? For what purpose?

T 4. Have you used the instruments designed to monitor the group processes? ____yes __No

If yes, were they useful in improving the functioning of the group? ____yes ___No

T 5. Have you utilized the Periodic Program Monitoring Instruments? ____yes _____no
If yes, were they helpful in improving the program in your school? ___yes___no

T&P 6. Have you had Review Committee meetings in your school this year? ___ yes___no
How often were they convened? ________every meeting_______as needed
Who atteneded? ________principal______leader_______monitor________other
Were they handled differently from last year in any way?

T&P 7. Have you had occasion to call any Policy Committee Meetings this year?---yes___no
If yes, For what purpose?
Who attended?
How was it handled?

T&P 8. Were the upward communication forms used by the group to communicate group solutions and problem diagnoses to the principal? _____yes ______no

T&P 9. Were the downward communication forms used by the Review Committee and/or Policy Committee to communicate back to the faculty? _____yes ______no

T 10. Have you used or referred to the training materials this year? ____yes____no
In what manner?

T 9. Approximately how many meetings did your Program Group have this year?___________
How were they scheduled? _______regularly_______as needed

T 10. What percentage of the faculty are actually involved in the program?__________%
How many people? ____________people

T&P 11. When the group is/was active, how much time did this program take on your part?
_________________hours per meeting? _______________hours per week?

T&P 12. Do you feel the principal should be present during all or some of the program group meetings? _________yes___________no

T&P 13. Has there been much interest from the faculty in the second wave of data that was recently returned to your school? ____________yes___________no ________some

P 14. Has the data about your school (either the first or second wave) been useful to you?

__________yes __________no

P Have you taken actions independent of your faculty's program group efforts to deal with any of the areas perceived by the teachers to be problematic?

__________yes __________no

T 15. Has your principal taken actions independent of the efforts of the program group to deal with any of the areas perceived by faculty to be problematic?

__________yes__________no __________?

T 16. Has the role you play in this program affected your general role as a member of the faculty? Specifically.

More-Less Yes NO

______ ________ Your knowledge about what is going on in the school?

______ ________ Your prestige

______ ________ Your authority

______ ________ Your influence

______ ________ Your position as a communication link?

Others?

P 17. Has this program affected your role as a principal?

More-Less Yes No

______ ________ Your knowledge about what is going on in the school?

______ ________ Your prestige

______ ________ Your authority

______ ________ Your influence

______ ________ Your position as a communication link?

Others?

P 18. Do you do anything differently than you did before the program?

eg.

How? Yes No

Faculty Meetings

Communication to Faculty

Supervision or Feedback to Faculty

Others

T 19. Does your principal do anything differently than he did before the program?

How? Yes No

Faculty Meetings
Communication to Faculty

Supervision or Feedback to Faculty

Others

T 20. Has the role of your school's principal changed as a result of the program?

More or Less Yes No

His knowledge concerning what is going on in the school

His prestige

His authority

His influence

His position as a communication link

Others

P 21. Has the general role of the leader or monitor as a teacher in this school changed as a result of this program?

More or less Yes No

Knowledge concerning what is going on in the school
prestige
authority
influence

T 22. What aspects of the sessions you've had with us, ie. training, brush-up training, meetings etc. have been especially useful to you in you capacity as a leader or monitor? As a teacher?

As a leader or monitor:

As a teacher:

P 23. Were any aspects of the training sessions or other sessions connected with this program helpful to you in your capacity as a principal?

T 24. How did you and your leader/monitor coordinate your roles?

P&T 25. Do your faculty members perceive the Program Group and O.D. procedures as permanent in your school?

__________yes ________no

As legitimate? ______yes _________no

As a change from the way things were before? _______yes _______no

P&T 26. Do you (Does your principal) perceive the Program Group and O.D. procedures as permanent in your school?

_________yes______no

As legitimate? ________yes ____no

As a change from the way things were before? ________yes________no

P&T 27. Did the program affect the distribution of influence in your school?

________yes ________no

If yes, how?

P&T 28. Do you think the program will continue in your school next year?

________yes _______no

T&P 28. Did you encounter any of the following arguments against the program, and if so, did it impede the program?

No	Yes	Impeded		
____	____	____	a.	Teachers who felt the program violated or threatened their autonomy?
____	____	____	b.	Teachers who refused to meet on their own time?
____	____	____	c.	Teachers who felt the program was not legitimate because of lack of central office support?
____	____	____	d.	Teachers who felt the program was not legitimate because of lack of principal support or enthusiasm.
____	____	____	e.	Teachers who felt that solving general school problems is not the job of a teacher.
____	____	____	f.	Teachers who didn't feel there were any problems to be solved.
			g.	Others

T 29. Were the following sources of conflict present in any of your meetings? If so, did they cause problems in group functioning?

No	Yes	caused Problems		
____	____	____	a.	Differences in educational philosophy?
____	____	____	b.	Differences in priorities for issues to be dealt with by the group?
____	____	____	c.	Personality conflicts?
____	____	____	d.	Conflict over the purpose of teachers meeting together in this program?
____	____	____	e.	Conflict over the perceived legitimacy of the program?
____	____	____	f.	Conflict over how best to deal with the principal?
			g.	Other

T&P 29. We suspect people participated in this program for different reasons. To what extent were these reasons present among your faculty?

Not at all	Very little	Some	Alot	
____	____	____	____	a. As a gripe session?
____	____	____	____	b. To get to know each other better.
____	____	____	____	c. To try to solve general school problems.
____	____	____	____	d. To increase teacher influence in the school.
____	____	____	____	e. For professional interaction.
____	____	____	____	f. To get ideas that would help out in their own teaching.
____	____	____	____	g. To avoid having decisions made behind their back.
____	____	____	____	h. As a tool to gain leverage on the principal.

Other reasons

T&P 30 WHat are some of the most important concerns of teachers in your building right now?

____

____

____

____

Does the O.D. program offer a viable way of dealing with any of these cpncerns?

What kinds of issues is the O.D. structure and mechanism best suited to deal with?

T&P 30. What benefits, if any, has your school gotten from this program?

What problems, if any , has this program caused in your school?

Do you have any general statements, feelings or suggestions concerning the roles, actions or intenetions of the staff from Northwestern in connection with this program?

In retrospect, do you have any general suggestions, comments or ideas concerning the program which you would like us to be aware of?

Thank you for your cooperation and assistance.

Additional Page for Principals

Has the principal group met this year?

Were there any attempts made to get it going again?

Were the recommendations which were made last year adopted and routinized in the district?

Budgetary autonomy ?

Scheduling of itinerants?

1.A. How often does someone check closely what you do or how you handle the people under you?

______Very often______Often_________sometimes_____________rarely____________Never

Regularly or irregularly?

Was this different last year? _______yes_______no

If yes, how often?

________very often_______often_________sometimes_______rarely__________never

Regularly or irregularly?

2. How often does someone insist and make sure that you make people under you follow standard procedures, practices or rules?

-________very often________often____________sometimes______________rarely__________never

Regularly or irregularly?

~~Was this different last~~ year?________yes__________no

If yes, how often?

________very often_________often____________sometimes___________rarely_________never

Regularly or irregularly?

3. How often does someone check to make sure principAls are following district guidelines, policies and programs?

___________very often__________often___________sometimes___________rarely______never

Regularly or irregularly?

Is this different from last year? ______yes_ _ _ __no

if yes, how often last year?

____________very often_________often_________sometimes__________rarely_______never

Regularly or irregularly?

Appendix N

INTERVIEW SCHEDULE-DISTRICT OFFICE PERSONNEL June, 1976

To better understand the impact, if any, our program has had on the various schools of the district, we need to know more about the strengths and weaknesses of the various schools, both participating and non-participating.

GOAL EFFECTIVENESS: Please name the schools which are the most effective in the district and then those which are the least effective in the following areas:

1. Responsiveness to the needs, concerns and desires of the community.
2. Experimentation with promising educational innovations.
3. Providing a positive and supportive school environment for students.
4. Implementing a high quality instructional program.

LEADERSHIP: Please name the schools in which the principals are the most and then those in which they are the least effective in the following areas:

1. Getting things done- for example, planning, organizing, implementing and in general making things happen.
2. Meeting the needs of teachers - for example, showing consideration and sensitivity to their professional and personal needs.

OPENNESS TO CHANGE:

1. Please name the schools in which the principals are the most and the least open to change . For example, changes in curriculum, administrative practices, scheduling practices, policies, etc.
2. Please name the schools in which the teachers are the most and the least open to change.

INTERNAL ENVIRONMENT: Please name the schools which are the highest and lowest in the following characteristics:

1. Professionalism of the Faculty: for example, exchanging information and ideas, participation in professional association, keeping abreast of their teaching field and current in educational practices.
2. Commitment of the Faculty to the School
3. Cohesiveness of the Faculty
4. Morale or General Satisfaction of the Faculty

This portion of the interview deals directly with the Organization Development program, its effects on the district, and your perceptions of the program and changes that should be made in it.

1. Did you have direct experience with any of the Program Groups or with the Principal Group? If so, please describe. Was the time you spent worth your while? Did the faculty have a legitimate request? Was it handled appropriately?

2. What impacts, either positive or negative, have you noticed this program had on schools in the district? Both in general and in specific instances.

interactions between teachers and principals

interactions between central office staff and individual schools

interactions between central office staff and principals

effectiveness of individual schools' problem solving ability

3. We'd like for you now to think about the program as a whole for a few minutes.

   a. How realistic and practical is it?

   b. Is it an effective way to solve problems in school districts?

   c. Is it an efficient way to solve problems in school districts?

4. Would you recommend this program to another district? Why or why not?

4. Based on your experiences with the Program: If you were going to start it again, how would you go about initiating the program in this district?

5. If the schools were going to continue this effort, how would you do it?

6. What suggestions would you have for improving this program if it were to be done in another district?

7. Was the data generated by this project useful to you? Do you feel it was useful to the individual schools?

Appendix O

Responses to Central Office Interview

1. Did you have direct experience with any of the Program Groups or with the Principal Group? If so, please describe. Was the time you spent worth your while? Did the faculty have a legitimate request? Was it handled appropriately?

R_1: No direct experience.

R_2: I sat down with the "planning group" at the high school several times this fall to try to help them decide whether or not to get involved again. I met several times with one dissatisfied principal and tried to keep his morale up. He was trying to stir up dissatisfaction because he was dissatisfied with his own group.

R_3: Had contact with the Principal Group. Both solutions worthwhile and beneficial change resulted: (1) flexibility in budgetary development and implementation so that funds could be spent on priorities in each building; (2) itinerants could be better scheduled at time when schools most needed them.

R_4: Went to one school. The solution was unsatisfactory for one teacher. Went to another school. Went on to record their comments to back up dismissal of psychologist.

R_5: Called on once but had vague recollections of it.

R_6: No. (He did not mention it, but he did go to at least one school to make an OD related decision.)

R_7: Yes--with a group at one school. Problem identified was too many kids reading below grade level. Worthwhile meeting led to several meetings with departments to help them plan special reading in content areas. It was handled appropriately.

R_8: Went to three schools (only mentioned 1 and 2 in interview).* One concerning teacher time spent duplicating materials--solution routinized. One concerning individualized reading programs--solution implemented at some grade levels.
*One concerning selection of supplemental materials.

R_9: Invited to go to one school.

R_{10}: Only one request.

2. What impacts, either positive or negative, have you noticed this program had on schools in the district? Both in general and in specific instances.

--interactions between teachers and principals
--interactions between central office staff and individual schools
--interactions between central office staff and principals
--effectiveness of individual schools' problem-solving ability

R_1: One principal in particular reported things had changed for the better. But personally I have no way to compare anything in district with way things were before.

R_3: It impacted on interactions between central office staff and individual schools only because we knew that principals were meeting with their staff.

No negative effect. Positive effects--schools which participated had a procedure for venting frustrations and for coming together with a problem-solving attitude.

R_4: Success depends on political situation--increase in working together--principal and teachers in several schools--central office and schools.

R_5: Got principals organized in a way they never were before--faculty had greater input into school discussions--better climate because teachers were working together.

R_6: Don't know of any.

R_7: One good thing is that Program Groups at high school cut across departments and so much of what goes on at high school level is done departmentally. Helped teachers to realize that they could solve problems rather than sitting back and complaining.

R_8: Faculty more involved in faculty meetings--not one-person, principal show any more.

R_9: One school moved special ed classes--caused problem because of how it was done but worked out all right in end.

R_{10}: Did solve some specific questions--positive experience for all.

3. We'd like for you now to think about the program as a whole for a few minutes.

   a. How realistic and practical is it?
   b. Is it an effective way to solve problems in school districts?
   c. Is it an efficient way to solve problems in school districts?

R_1: In principle the concept is workable and could be both effective and efficient.

R_2: It is realistic and practical. A good principal does this sort of thing.

It's how you bring about change in your building. But a building is only as good as how well the people work together.

It is effective if people do it. They must start out with attitude "if we can, we'll change things"--however must be aware the board may say "no" down the pike. But it's important for the faculty to take a stand. The guidelines may be too rigid but at first they are necessary.

You caught us at a bad time for efficiency.

R_3: It is realistic and practical in districts where there is no union or where there is a more effective teachers' organization at each building level. The vying for prestige and power between the AFT and NEA causes divisions between teachers even within buildings.

It is effective avenue for venting frustrations and registering suggestions.

Mass participation is never efficient.

R_4: It is realistic and practical, depending upon the interest of the participants. It is as good as the people in it.

Effective with "little," i.e., school level, problems.

Probably not efficient in terms of time, but not only way to judge worth.

R_5: Will work in selected schools but not in general: (1) if there is commitment; (2) if principal has security; and (3) if there is cohesive faculty. Also effective and efficient only in these schools.

R_6: Difficult to understand what the program was trying to do. What were the objectives? What were the procedures?

R_7: (a) Not practical from time aspect. As pressures build, teachers not willing to give up planning period. Too bad more schools not involved. (b) Could be effective means if more schools were involved.

4A. Would you recommend this program to another district? Why or why not?

R_1: I don't have enough information to recommend this particular program, but I would recommend the concept of finding ways to get teachers involved in problem solving.

R_2: I wouldn't hesitate to tell another district to try it. It gives everyone a chance to get input into what is going on if they take advantage of it. It sets up a structure so that they will.

R_3: Depends on the district. Not to a district with strong teacher organization conflict. History of this district was important. It's hard for us to be one dominant group; there is not so much pressure on the in-group to take a hard line.

R_4: I'm ambivalent, but slightly more positive--it gets people talking more--gives a feeling of decision making input problems.

Potential for "digging up" problems.

Not all that much good came out of it because no major areas were dealt with.

R_5: Yes, because it's a positive way to do things. It gets teacher involvement and the more involved the teachers are, the more they will be committed.

R_6: Yes, think program has merit but somehow must get across clear explanation of what it is all about.

R_7: Yes, but only if more people involved and administrative backing.

4B. Based on your experiences with the program, if you were going to start if again, how would you go about initiating the program in this district?

R_1: Can't answer.

R_2: Superintendent needs more lead time to get other superintendents and principals to have input into the decision. Other superintendents need to know more to be able to talk to principals about it. It wasn't a fair test for the program. With the superintendent leaving there were too many other problems to give the program the consideration it deserved. Need to interact among ourselves so we could promote rather than just go through the motions. Then we might have had all schools involved.

$R_{[illegible]}$: Shouldn't initiate it unless there was a real need for it--should ask, "Are those avenues for ordinary classroom teacher to be heard?" In our district there was overlapping with already existing plans.

Also should be commitment by principals and cabinet. The program had to hang on to survive because there wasn't total commitment. If there were total commitment, there would be a lot more activities.

R_4: Nothing wrong with initiation as it was--it moved slowly because other things were going on, and "district didn't want to do it all that bad."

R_5: Not much different. Might try to pilot in one school first before disseminating it to other schools in this district.

R_7: Get a group of key teachers to sell it to other teachers.

5. If this district were going to continue this effort, how would you do it?

R_1: Would identify staff involvement in decision making as an administrative objective and look at the OD program as a strategy for achieving this objective. I have some concerns about the whole authority issue.

R_2: Don't know. Now we have schools lined up on each side. But those who wish to continue should be able to.

R_3: I would establish it on a very sound basis through each building principal and his faculty. Get commitment at least to try it out from each school, so no school left out. Need to get school board to adopt it as a district plan. The superintendent should recommend it to the board as having support from superintendent on down. This would give greater prestige and importance to the program. The board would be willing to adopt it, because we are oriented to teacher power and can accept it.

R_4: Need an increase in number of schools to prove efficiency over time; haven't seen it. Need either outside energy or the superintendent.

R_5: Concentrate program in only those schools with commitment to it and with principals who are in favor of it.

R_7: Just let the ones who are involved and want to continue to do so stay involved.

R_{10}: City-wide adopted program, instead of letting schools choose.

6. What suggestions would you have for improving this program if it were to be done in another district?

R_1: (1) Would increase the amount of time connected with it in service training of principals and staff. (2) I would work with the principals to gain their commitment to make the program work and explain more clearly what the program is designed to do. (3) Spend training time giving principals experimental training on their own leadership styles. "Self-awareness, "self-perception," "values" issues need to be covered in training. Look critically at the dimensions of administration. Blake and Mouton managerial grid idea.

R_2: Need longer time to consider it in schools so get better teacher leaders in the schools. Often got the "gripers."

Principals needed lead time in order to get leaders involved.

Lost participation of some teachers in some building because of the leaders.

R_3: Need more emphasis on the concept that it is non-threatening. Principals didn't understand that--they felt it was threatening.

Some principals felt the questions on questionnaires were negatively slanted.

The model itself has a lot of merit, but it may be more useful in some districts than in others.

R_4: Need district which wants it and sees the need for it.

R_5: Start smaller--concentrate in a few schools first.

R_7: Get more people involved. Take more time to explain the program.

R_8: Inform all people in the administration, not just cabinet level people.

R_{10}: Many persons in district (e.g., as supervisors) need to be briefed/included in the program.

7. Was the data generated by this project useful to you? Do you feel it was useful to the individual schools?

R_1: It was very useful to the schools. I intend to look at it more thoroughly myself this summer.

R_2: I read it and made a point of being more responsive when it reflected on me.

R_3: The data was interesting. You sort of use it like test results--you look at it but don't use it to the ultimate.

R_4: Haven't had a chance to use it to its potential.

R_5: Yes, but don't remember how. (He made a note on his calendar to look at the results after interviewer asked this question.)

R_6: Yes, for schools but I haven't used it personally.

R_7: I haven't seen any of it.

R_8: Yes. I would like to have a copy for myself.

R_{10}: Yes. Some special ed leaders shared special services data with me.

8. General comments.

R_2: We didn't get a fair shake out of it. We didn't have a stable situation. The whole district has an elementary-high school split, even at the board level.

I would place a high priority on professional decision making.

R_3: I believe that the principals of the schools which participated in this program benefitted from it, with no exceptions.

My major objection is that it overlapped with pre-existing channels.

I believe professional problem solving is a very high priority, especially in a larger district where teachers feel distant from decision-making processes. There is a great need for a two-way structure.